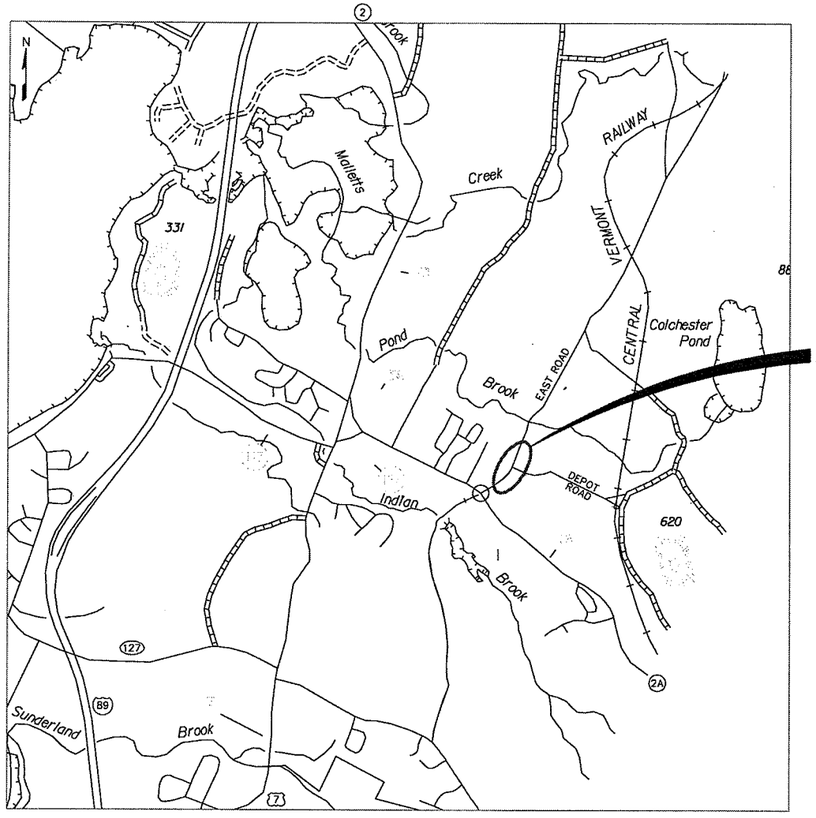
TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD / DEPOT ROAD INTERSECTION IMPROVEMENTS

JUNE, 2012



LOCATION PLAN
SCALE: 1"=2000'±

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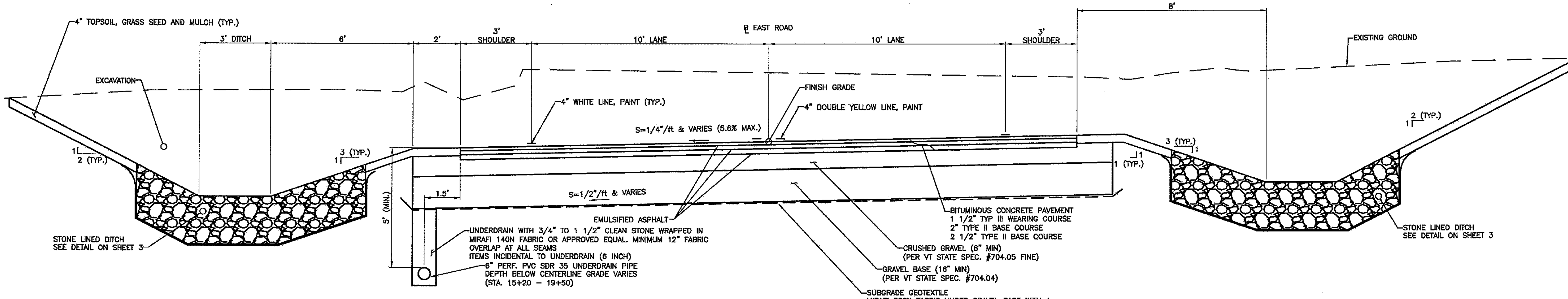
planning
management
development

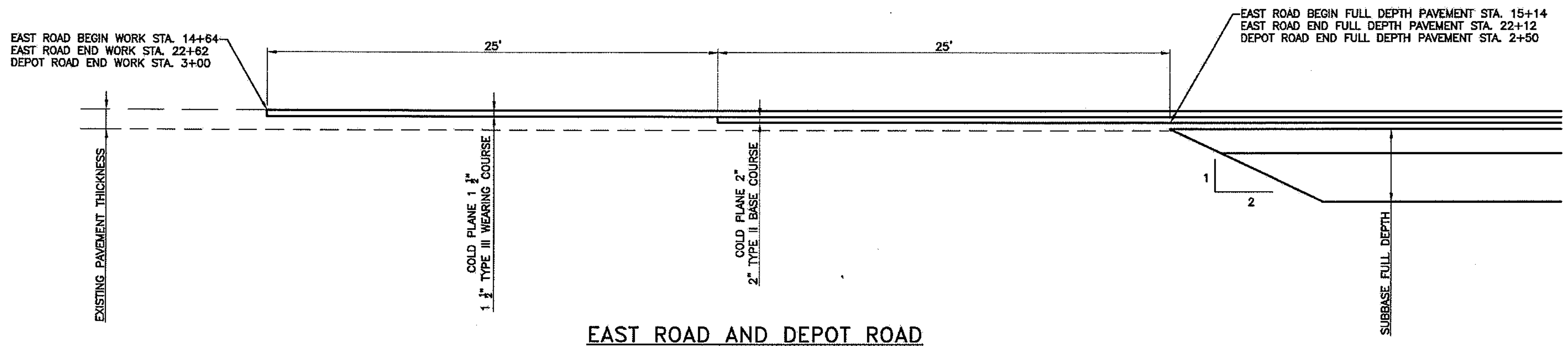
LIST OF DRAWINGS



EAST ROAD SUPERELEVATED SECTION

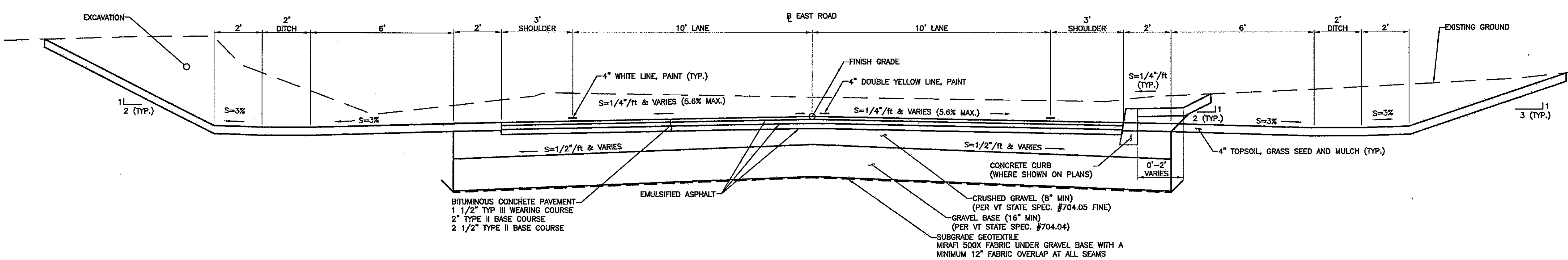
SCALE: 1" = 2'

SUPERELEVATION TABLE		
STATION	LEFT CROSS SLOPE	RIGHT CROSS SLOPE
EAST ROAD		
14+64	MATCH	MATCH
15+14	0.00%	0.00%
15+67	−2.08%	2.08%
16+58	−5.60%	5.60%
18+07	−5.60%	5.60%
18+70	−2.08%	2.08%
19+08	−2.08%	0.00%
19+46	−2.08%	−2.08%
22+00	−2.08%	−2.08%
22+62	MATCH	MATCH
DEPOT ROAD		
0+00	MATCH	MATCH
0+54	2.08%	−2.08%
2+25	2.08%	−2.08%
2+50	MATCH	MATCH



EAST ROAD AND DEPOT ROAD PAVEMENT AND SUBBASE TRANSITION

NOT TO SCALE:



EAST ROAD NORMAL SECTION

SCALE: 1" = 2'

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

2 1 0 2 6
SCALE IN FEET

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

TYPICAL SECTIONS

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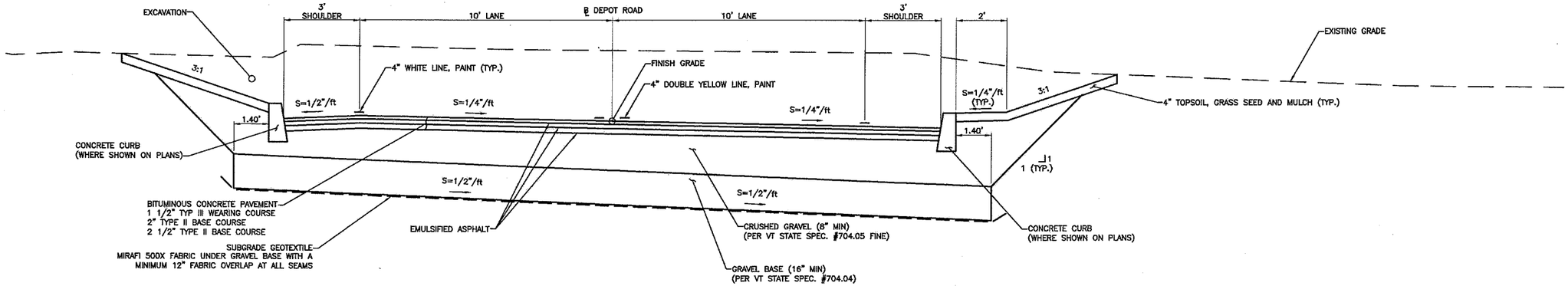
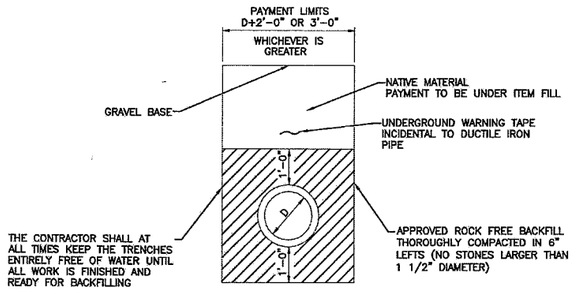


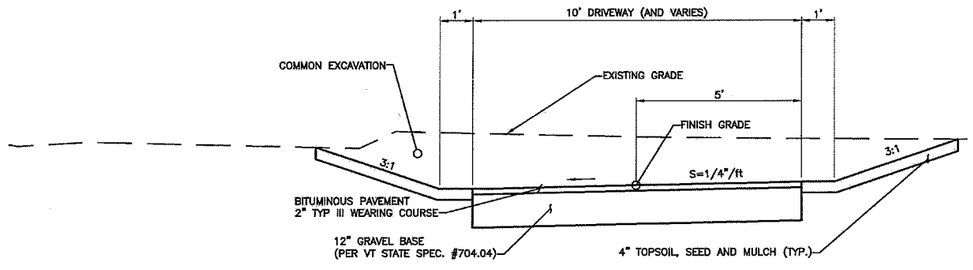
DEPOT ROAD CROSS SECTION

SCALE: 1" = 2'



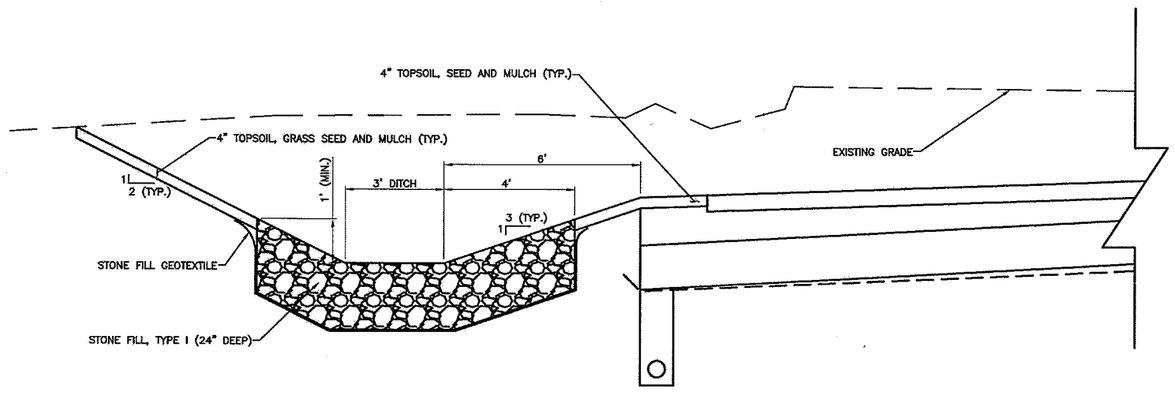
WATER MAIN TRENCH BOX SECTION

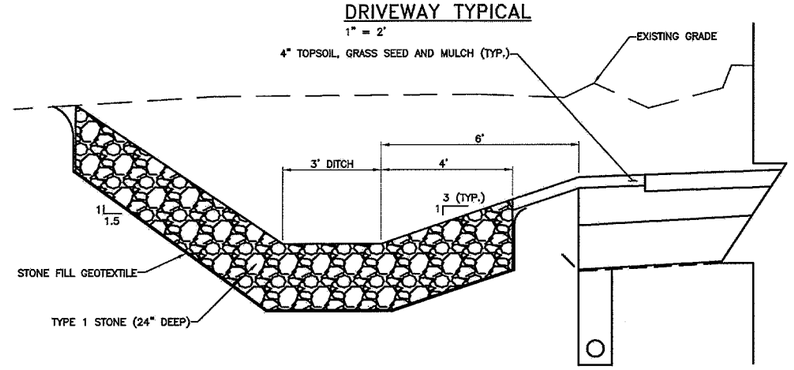
NOT TO SCALE



DRIVEWAY TYPICAL

1" = 2'





STEEP BACKSLOPE DETAIL

NOT TO SCALE

NOTES:

1. STONE TO BE APPLIED TO LONGITUDNAL SLOPES STEEPER THAN 0.025 FT/FT.
2. SLOPE TRENCH TO DRAIN WITH A MINIMUM SLOPE OF 0.005 FT/FT.
3. STONE TO BE APPLIED ON FORESLOPES AND BACKSLOPES STEEPER THAN 0.5 FT/FT.
4. STONE FILL SHALL BE IN ACCORDANCE WITH VT STATE SPEC. #706.04.

STONE LINED DITCH

NOT TO SCALE

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

2 1 0 2 6
SCALE IN FEET

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

TYPICAL SECTIONS

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GENERAL NOTES

1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE TOWN OF COLCHESTER'S DEPARTMENT OF PUBLIC WORKS (DPW) SPECIFICATIONS AND STANDARDS AND ALSO THE VERMONT AGENCY OF TRANSPORTATION'S (VTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011 EDITION, LATEST REVISIONS AND VTRANS' STANDARD DRAWINGS FOR CONSTRUCTION FOR ANY COMPONENT NOT OTHERWISE COVERED UNDER THE TOWN OF COLCHESTER'S SPECIFICATIONS.

2. THE CONTRACTOR SHALL NOT DISRUPT ANY EXISTING UTILITY SERVICE (PRIVATE OR PUBLIC) WITHOUT WRITTEN AUTHORIZATION FROM THE TOWN OF COLCHESTER.

3. SURFACE FEATURES SUCH AS SIGNS, FENCES, MAIL BOXES, STONE WALLS, PROPERTY CORNER MARKERS, ETC., ENCOUNTERED IN THE CONSTRUCTION OF THE PROJECT SHALL BE TAKEN DOWN, STORED AND RESET BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. THE COST OF REMOVING AND RESETTING ITEMS SHALL BE INCIDENTAL TO THE CONTRACT.

4. ALL UTILITY POLES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED IN THESE PLANS.

5. SUBSURFACE FEATURES SUCH AS ELECTRIC AND TELEPHONE LINES, WATER LINES, SEWER LINES, STORM DRAIN AND CULVERTS, ETC., ENCOUNTERED IN THE CONSTRUCTION OF THE PROJECT SHALL BE PROTECTED, SUPPORTED, OR OTHERWISE MAINTAINED THROUGHOUT THE CONSTRUCTION BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT UNLESS PAYMENT IS SPECIFICALLY NOTED AS A SEPARATE PAY ITEM. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AND/OR HIGHWAY DEPARTMENTS WHEN THE WORK INVOLVES THEIR RESPECTIVE FACILITIES.

6. THE CONTRACTOR SHALL CONTACT "DIG SAFE" [1-888-DIG-SAFE (1-888-344-7233)] AND ALL AFFECTED UTILITY COMPANIES PRIOR TO PERFORMING ANY EXCAVATION, IN ACCORDANCE WITH DIG SAFE'S RULES OF NOTIFICATION. THE COST OF COORDINATING WITH DIG SAFE AND THE UTILITY COMPANIES SHALL BE INCIDENTAL TO MOBILIZATION/DEMOBILIZATION.

7. ANY SURFACE OR SUBSURFACE FEATURES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE RESTORATION SHALL BE AT THE CONTRACTORS SOLE EXPENSE.

8. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE RESIDENT ENGINEER AND SURVEYOR TO LAYOUT BASELINE, MAINTAINING HORIZONTAL AND VERTICAL CONTROL, AND RE-ESTABLISHING ELEVATIONAL BENCH MARKS THAT WILL BE LOST OR DISTURBED DURING CONSTRUCTION. THE COST TO LAYOUT AND MAINTAIN THE BASELINE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT WILL NOT BE MADE DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO MOBILIZATION/DEMOBILIZATION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING CONDITIONS AFFECTING THE WORK. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE ADVANCING THE WORK. SHOP DRAWINGS REQUIRED FOR VARIOUS ITEMS OF THE WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS BY THE CONTRACTOR PRIOR TO SUBMITTAL FOR THE ENGINEER'S APPROVAL AND SHALL BE SO NOTED.

10. ANY TREES OR BRANCHES WITHIN THE OVERHEAD AND SIDE CLEARANCE LIMITS INDICATED AND ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE SAW-CUT AND REMOVED. PAYMENT WILL BE INCIDENTAL TO CLEARING AND GRUBBING (INCL. INDIV. TREES & STUMPS).

11. RESTORATION OF DISTURBED AREAS: RESTORE DISTURBED AREAS, EXCEPT STONE FILL AREAS, WITH 4" TOPSOIL SEED AND MULCH, UNLESS THE RESIDENT ENGINEER DIRECTS THE USE OF SUITABLE EXCAVATED MATERIAL.

12. AN ON-SITE PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITY WITH THE CONTRACTOR, RESIDENT ENGINEER, DIRECTOR OF PUBLIC WORKS AND AFFECTED LANDOWNERS IN ATTENDANCE.

13. ALL SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION AND ITS LATEST REVISIONS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURE THAT ALL CONSTRUCTION REQUIREMENTS ARE MET.

15 ALL WOODY DEBRIS (TREE LIMBS, BRANCHES) SHALL BE CHIPPED AND MULCHED ON-SITE AND USED FOR TEMPORARY EROSION CONTROL TO THE MAXIMUM EXTENT.

16. EMULSIFIED ASPHALT SHALL BE APPLIED AS A TACK COAT WHERE SHOWN ON TYPICAL SECTIONS AT A RATE OF 0.025 GAL / SY OR AS DIRECTED BY THE RESIDENT ENGINEER.

17. COLD PLANING SHALL BE COMPLETED ACCORDING TO THE TYPICAL OR AS OTHERWISE NOTED ON THE PLANS. A FULL DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT THE BEGINNING AND END OF THE PROJECT AND ALL SIDE ROAD APPROACHES AS DENOTED ON THE PROJECT PLANS OR AS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. SAWCUTTING WILL NOT BE PAID FOR SEPARATELY. IT SHALL BE CONSIDERED INCIDENTAL TO COLD PLANING BITUMINOUS PAVEMENT.

18. BITUMINOUS CONCRETE PAVEMENT WORK, WHICH COULD INVOLVE SOME HAND-WORK (SUCH AS DRIVEWAYS AND AROUND DRAINAGE AND UTILITY STRUCTURES) SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR BITUMINOUS CONCRETE PAVEMENT.

19. ALL SIGNS WITH CONSTRUCTION LIMITS SHALL BE TEMPORARILY REMOVED AND RESET.

20. STANDARDS, SPECIFICATIONS AND DETAILS FOR THE INSTALLATION OF WATER LINES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CHAMPLAIN WATER DISTRICT, FOUND IN APPENDIX A. OF THE COLCHESTER DEPARTMENT OF PUBLIC WORKS STANDARDS AND SPECIFICATIONS AMMENDED MARCH 2012.

LIST OF COLCHESTER DPW STANDARDS

TYPICAL CONCRETE CURB	FIG. 3.8
DRIVEWAY ENTRANCE ON UNCURBED STREET	FIG. 3.10
PRECAST CATCH BASIN w/UNDERDRAIN and/or CURB HYDRANT FLAG	FIG. 4.2
CONCRETE THRUST BLOCK DATA	FIG. 5.1
WATER SERVICE CONNECTION	FIG. 5.14
HYDRANT ASSEMBLY DETAIL	FIG. 5.15
TAPPING SLEEVE AND VALVE DETAIL	FIG. 5.18
TYPICAL CONCRETE THRUST BLOCK DETAILS	FIG. 5.25
BEARING BLOCK DETAILS	FIG. 5.26
HYDRANT FLAG	FIG. 5.27
GRAVITY THRUST BLOCK DETAILS	FIG. 5.28
GRAVITY THRUST BLOCK DETAILS	FIG. 5.29
GUIDE to MULCH METERIALS, RATES, and Uses	–
CHECK DAM	FIG. 8.3

LIST OF VTRANS STANDARD DRAWINGS

E-100	CONSTRUCTION APPROACH SIGNS	01-02-2004
E-100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01-02-2004
E-101	CONSTRUCTION SIGN DETAILS	05-30-2003
E-102	CONSTRUCTION SIGN DETAILS	06-30-2003
E-102A	CONSTRUCTION SIGN DETAILS	05-01-2004
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	03-01-2004
E-106	TRAFFIC CONTROL MISCELLANEOUS DETAILS	03-01-2004
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	06-30-2003
E-107A	BREAKAWAY BARRICADE DETAILS	06-08-2009
E-108A	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS	06-08-2009
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	08-08-1995
E-111	MINOR MAINTENANCE OPERATION	03-11-1997
E-112	TRAFFIC CONTROL FOR TYPICAL MOVING MAINTENANCE OPERATIONS	01-23-1997
E-121	STANDARD SIGN PLACEMENT CONVENTIONAL ROAD	08-08-1995
E-193	PAVEMENT MARKING DETAILS	08-18-1995
J-3	MAILBOX SUPPORT DETAIL (SINGLE AND MULTIPLE SUPPORT)	08-07-1995

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

GENERAL NOTES SHEET

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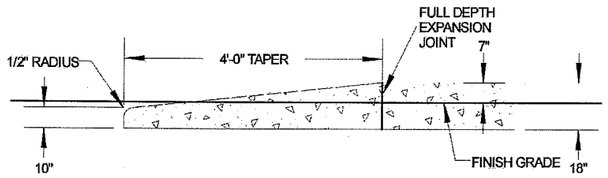
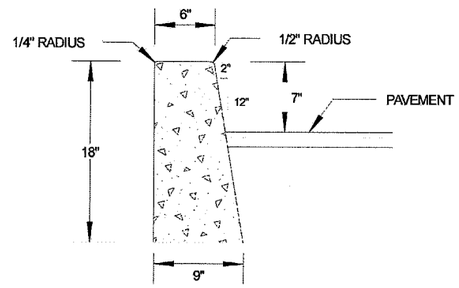
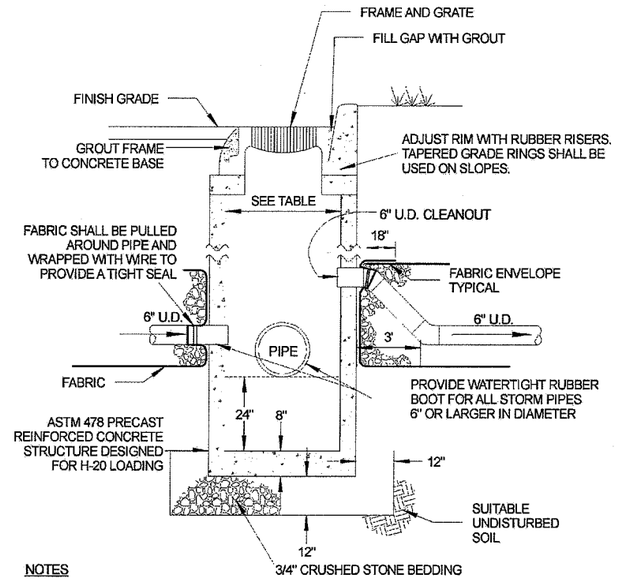


TYPICAL TAPERED CURB



TYPICAL CONCRETE CURB

Figure 3.8



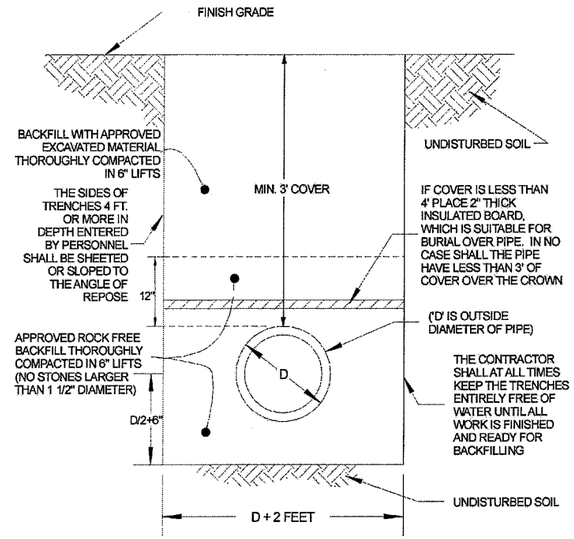
NOTES

1. THE MIRAFI 140N FABRIC SHALL COMPLETELY ENVELOPE THE STONE UNDERDRAIN TRENCH ON THE SIDES, BOTTOM, TOP AND ENDS.
2. THE 6" UNDERDRAIN PIPES ARE TO BE INSTALLED PARALLEL TO THE CURB OR EDGE OF ROADWAY.

TYPE	CATCH BASIN DIAMETER	LARGEST PIPE DIA. ALLOWED	SIDEWALL THICKNESS	CONCRETE COVER THICKNESS
I	36"	18"	4"	6"
II	48"	30"	5"	10"
III	60"	36"	6"	12"
IV	72"	48"	7"	16"

PRECAST CATCH BASIN w/ UNDERDRAIN and/or CURB

Figure 4.2



TYPICAL STORM SEWER TRENCH

Figure 4.3

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

DETAIL SHEET 1

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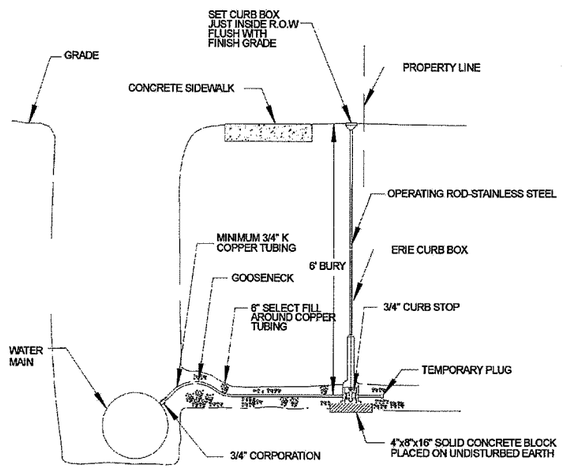
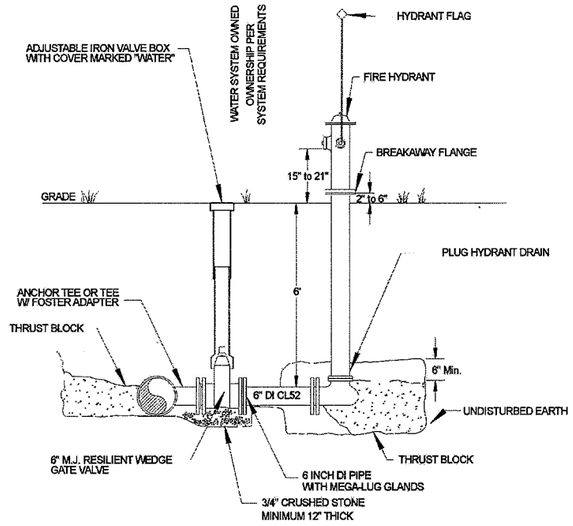


NOTE

- SEE SPECIFICATIONS FOR TAPPING SADDLE, CORPORATION, AND CURBSTOP REQUIREMENTS

WATER SERVICE CONNECTION

Figure 5.14

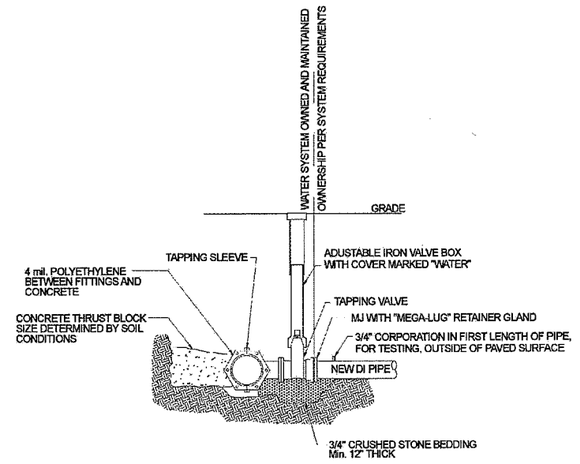


NOTES

1) ALL FITTINGS ARE TO HAVE WEDGE STYLE RETAINING GLANDS.
2) PRIOR TO POURING THRUST BLOCKS ALL FITTINGS ARE TO BE WRAPPED WITH 4 mil. POLYETHYLENE.
3) OWNERSHIP BEYOND THE GATE VALVE SHALL BE IN ACCORDANCE WITH THE WATER SYSTEM REQUIREMENTS.

HYDRANT ASSEMBLY DETAIL

Figure 5.15



NOTES

1) WET TAPS SHALL BE PERFORMED BY PRE-APPROVED FIRMS ONLY. POSSESSING A CURRENT CERTIFICATE OF INSURANCE.
2) ALL FITTINGS THAT ARE TO HAVE CONCRETE POURED AROUND THEM ARE TO BE WRAPPED WITH 4 mil. POLYETHYLENE PRIOR TO CONCRETE PLACEMENT.
3) WHEN TAPPING TRANSMISSION MAIN THE INDICATED OWNERSHIP DESIGNATION SHALL APPLY.
4) WHEN TAPPING THE TRANSMISSION MAIN OR WATER SYSTEM DISTRIBUTION MAIN, OWNERSHIP BEYOND THE TAPPING VALVE SHALL BE IN ACCORDANCE WITH THE WATER SYSTEM REQUIREMENTS.

TAPPING SLEEVE AND VALVE DETAIL

Figure 5.18

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

DETAIL SHEET 2

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EBS	JUNE 2012
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EPD	

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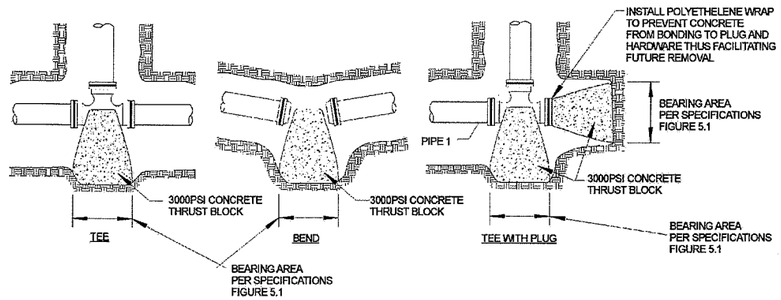

NOTES:

1. CONCRETE NOT TO OVERLAP ANY JOINT.
2. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.
3. ALL MECHANICAL JOINT FITTINGS TO HAVE RETAINER GLANDS.

TYPICAL CONCRETE THRUST BLOCK DETAILS

Figure 5.25

Mulch Material	Quality Standards	Per 1000 Sq. Ft.	Per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs.	10-20 tons	2-7"	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green due and dispersing agent	50 lbs.	2,000 lbs.		Apply with hydromulcher. No tie down required. Less erosion control provided than 2 tons of hay or straw.
Gravel, Crushed Stone or Slag	Washed; Size 2B or 3A – 1 ½"	9 cu. yds.	405 cu. yds.	3"	Excellent mulch for short slopes and around plants and ornamentals. Use 2B where subject to traffic. (Approximately 2,000 lbs/cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried. Free of undesirable seeds & coarse materials	90-100 lbs. 2-3 bales	2 tons (100-120 bales)	Cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environment for germinating seeds.
Jute twisted yarn	Undyed, unbleached plain weave. Warp 78 ends/yd., Weft 41 ends/yd. 60-90 lbs./roll	48"x 50 yds. or 48"x75 yds.	48"x 50 yds. or 48"x75 yds.		Use without additional mulch. Tie down as per manufacturer's specifications. Good for centerline of concentrated water flow.
Excelsior wood fiber mats	Interlocking web of excelsior fibers with photodegradable plastic netting	8"x100" 2-sided plastic, 48"x180" 1-sided plastic	8"x100" 2-sided plastic, 48"x180" 1-sided plastic		Use without additional mulch. Excellent for seeding establishment. Approximately 72 lbs./roll for excelsior with plastic on both sides. Use 2-sided plastic for centerline of waterways.
Compost	Up to 3" pieces, moderately to highly stable	3-9 cu. yds.	134-402 cu. yds.	1-3"	Coarser textured mulches may be more effective in reducing weed growth and wind erosion.
Straw or coconut fiber, or combination	Photodegradable plastic net on one or two sides	Ost are 6.5 ft. x 3.5 ft.	81 rolls		Designed to tolerate higher velocity water flow, centerlines of waterways, 60 sq. yds. per roll.

Guide to Mulch Materials, Rates, and Uses

MINIMUM AREA IN SQUARE FEET OF BEARING SURFACE REQUIRED FOR CONCRETE THRUST BLOCKS

3"				4"				6"				8"				12"				16"				SOIL CONDITIONS	SAFE BEARING LOAD (PSF)
ENDS &TEES	90° ELB	45° ELB	22.5° ELB	ENDS &TEES	90° ELB	45° ELB	22.5° ELB	ENDS &TEES	90° ELB	45° ELB	22.5° ELB	ENDS &TEES	90° ELB	45° ELB	22.5° ELB	ENDS &TEES	90° ELB	45° ELB	22.5° ELB	ENDS &TEES	90° ELB	45° ELB	22.5° ELB		
0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	4.0	5.5	3.0	1.5	8.0	10.0	5.0	4.0	SOUND SHALE	10,000
1.0	1.0	1.0	0.5	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.5	2.0	10.0	14.0	7.5	4.0	25.0	30.0	15.0	12.0	CEMENTED GRAVEL & SAND	4,000
1.0	1.5	1.0	1.5	2.0	2.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	30.0	35.0	20.0	15.0	COURSE.& FINE COMPACT SAND	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	40.0	45.0	25.0	20.0	MEDIUM CLAY (CAN BE SPADED)	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	80.0	90.0	50.0	40.0	SOFT CLAY	1,000

MAXIMUM WATER PRESSURE = 300 PSI

NOTE: REDUCER BEARING AREA = 45° BEND, LARGER PIPE

NOTE:

THRUST BLOCKS ON PIPE LARGER THAN 16" DIA. ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER.

CONCRETE THRUST BLOCK DATA

Figure 5.1

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

DETAIL SHEET 3

DRAWN BY	DATE
EBS	JUNE 2012
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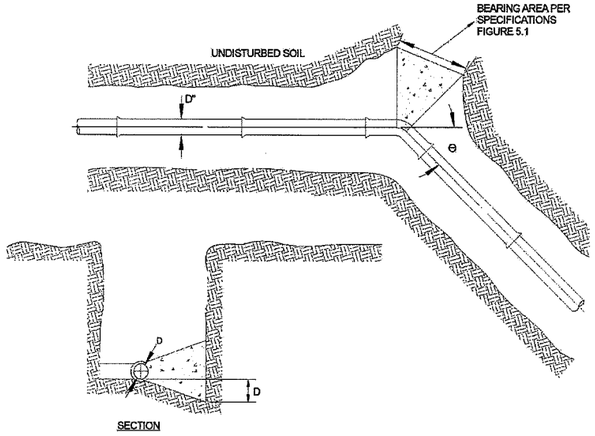
EPD	220006
PROJ. ENG.	DRAW. NO.
EPD	

SHEET 7 OF 38



SECTION

NOTES:

1) BEARING SURFACE SHOULD, WHERE POSSIBLE BE PLACED AGAINST UNDISTURBED SOIL. WHERE IT IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% MODIFIED PROCTOR DENSITY.

2) BLOCK HEIGHT SHUOLD BE CHOSEN SUCH THAT THE CALCULATED BLOCK WIDTH VARIES BETWEEN ONE AND TWO TIMES THE HEIGHT.

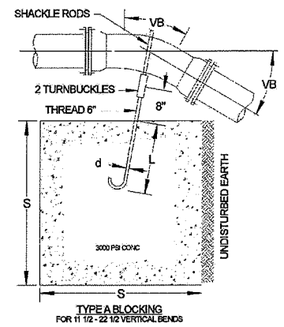
BEARING BLOCK DETAILS

Figure 5.26

TYPE A BLOCKING
FOR 11 1/2 - 22 1/2 VERTICAL BENDS

PIPE SIZE NOM DIA (INCHES)	VB VERTICAL BEND DEGREES	NO. OF CU/FT OF CONC BLOCKING	S SIDE OF CUBE (FEET)	d DIA OF SHACKLE RODS(2)* (INCHES)	L DEPTH OF RODS IN CONC. (FEET)
4"	11 1/4	8	2.0	3/4"	1.6
	22 1/2	16	2.5		
8"	11 1/4	16	2.5	3/4"	1.6
	22 1/2	32	322		
16"	11 1/4	28	3.0	3/4"	1.6
	22 1/2	55	3.8		
12"	11 1/4	60	3.9	3/4"	1.6
	22 1/2	118	4.9	7/8"	2.2
16"	11 1/4	104	4.7	7/8"	2.2
	22 1/2	205	5.9	1 1/8"	3.7

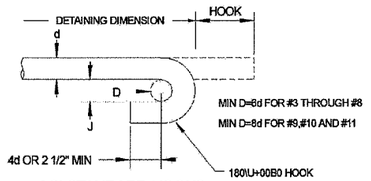
* FOR 60 KSI THREADED REBAR



TYPE A BLOCKING
FOR 11 1/2 - 22 1/2 VERTICAL BENDS

RECOMMENDED 180IU+00B0 END HOOK DIMS

BAR SIZE	J (IN)
#6	6
#7	7
#8	8
#9	11 1/4
#10	12 3/4
#11	14 1/4



ACI STANDARD HOOKS

NOTES:

1) FOR DI BENDS ONLY

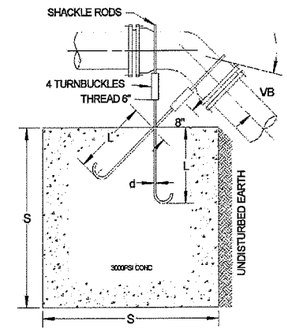
2) FOR VERTICAL BENDS ONLY

GRAVITY THRUST BLOCK DETAILS

Figure 5.28

TYPE B BLOCKING
FOR 45IU+00B0 VERTICAL BENDS

PIPE SIZE NOM DIA(INCHES	NO. OF CU/FT OF CONC BLOCKING	S SIDE OF CUBE (FEET)	d DIA OF SHACKLE RODS(2) (INCHES)	L DEPTH OF RODS IN CONC (FEET)
4"	29	3.1	3/4"	1.6
6"	59	3.9		
8"	102"	4.7		
12"	218	6.0		
16"	378	7.2	1 1/8"	3.7



TYPE B BLOCKING
FOR 45IU+00B0 VERTICAL BENDS

NOTES:

1) FOR DI BENDS ONLY

GRAVITY THRUST BLOCK DETAILS

Figure 5.29

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

NO.	DATE	REVISIONS	BY	CK'D

DuBois & King inc.
engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

DETAIL SHEET 4

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QUANTITY SHEET 1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

GOV'T NON-PARTIC.	FULL CE	TRAINING	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
				1	1	LS	CLEARING AND GRUBBING, INCL. INDIVIDUAL TREES & STUMPS	201.10	-
				1	1	EACH	REMOVING LARGE TREES	201.16	-
				9350	9350	CY	EARTH EXCAVATION	-	10.0
				290	290	CY	FILL	-	9.1
				650	650	CY	TRENCHING	-	5.3
				340	340	CY	BACKFILL	-	6.5
				550	550	SY	COLD PLANING BITUMINOUS PAVEMENT	210.10	12.8
				1400	1400	CY	GRAVEL BASE	-	18.3
				1150	1150	CY	CRUSHED GRAVEL	-	6.6
				30	30	CWT	EMULSIFIED ASPHALT	-	4.0
				1000	1000	TON	BITUMINOUS CONCRETE PAVEMENT	-	19.0
				220	220	LF	15" CORRUGATED POLYETHYLENE PIPE (PE)	-	2.0
				2	2	EACH	CATCH BASIN	-	-
				450	450	LF	UNDERDRAIN (6 INCH)	-	24.0
				1	1	MGAL	DUST CONTROL (WITH WATER)	-	-
				620	620	CY	STONE FILL, TYPE I	613.10	4.6
				620	620	LF	CONCRETE CURB	-	6.0
				10	10	LF	REMOVAL OF EXISTING CURB	616.41	3.0
				3	3	EA	RELOCATE MAILBOX, SINGLE SUPPORT	617.10	-
				1	1	EA	YIELDING MARKER POSTS	619.17	-
				1	1	EA	REMOVING AND RESETTING PROPERTY MARKERS	619.20	-
				1	1	EA	WATER SERVICE CONNECTION	-	-
				610	610	LF	DUCTILE IRON PIPE (8 INCH)	-	10
				250	250	LF	DUCTILE IRON PIPE (12 INCH)	-	8
				3	3	EA	TAPPING SLEEVE AND VALVE	-	-
				1	1	EA	HYDRANT ASSEMBLY	-	-
				1	1	EA	REMOVE HYDRANT	629.30	-
				1	1	LS	TESTING AND DISINFECTION	-	-
				100	100	HR	UNIFORMED TRAFFIC OFFICERS	630.10	10.0
				2170	2170	HR	FLAGGERS	630.15	10.0

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

NOTE:
SEE VERMONT AGENCY OF TRANSPORTATION (VTRANS) 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011 FOR ITEMS WITH ITEM NUMBERS

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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DuBois & King inc.
engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

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QUANTITY SHEET 1

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QUANTITY SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

GOV'T NON-PARTIC.	FULL CE	TRAINING	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
	1				1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
				1	1	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
				1	1	LS	TRAFFIC CONTROL	641.10	-
				2200	2200	LF	4 INCH WHITE LINE, PAINT	-	55
				1950	1950	LF	4 INCH YELLOW LINE, PAINT	-	48
				30	30	LF	24 INCH STOPBAR, PAINT	-	4
				2910	2910	SY	SUBGRADE GEOTEXTILE	-	1.1
				1250	1250	SY	STONE FILL GEOTEXTILE	-	23.4
				40	40	LB	GRASS SEED	-	7.9
				2	2	TON	MULCH	-	0.9
				300	300	CY	TOPSOIL	-	12.3
				100	100	CY	STONE CHECK DAMS	-	5.2
				2	2	EA	INLET PROTECTION	-	-
				2	2	EA	SMALL TREES (DECIDUOUS)	-	-
				17	17	EA	LARGE TREES (CONIFEROUS)	-	-
				4	4	EA	LARGE TREES (DECIDUOUS)	-	-
				10	10	EA	REMOVING SIGNS	675.50	-
				10	10	EA	ERECTING SALVAGED SIGNS	675.60	-
				8	8	EA	SETTING SALVAGED POSTS	675.61	-
				180	180	LF	SPECIAL PROVISION (VINYL FENCE, 6 FEET)	900.640	8.7

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

NOTE:
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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

QUANTITY SHEET 2

DRAWN BY EBS	DATE JUNE 2012
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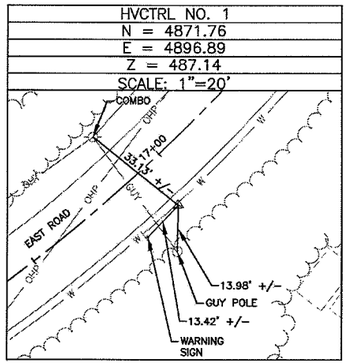
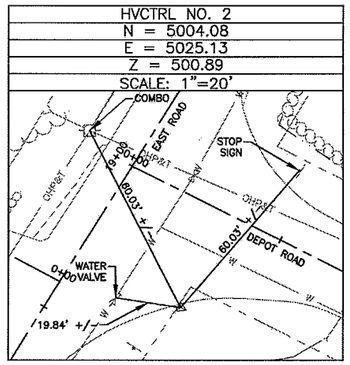
PI COORDINATES

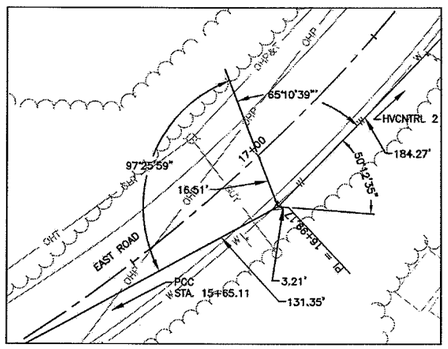
#	POINT	STATION	NORTHING	EASTING
EAST ROAD				
1	BP	10+00.00	4607.58	4253.87
2	PI	14+97.05	4777.26	4721.07
3	PI	16+99.17	4871.54	4900.09
4	EP	24+01.32	5470.84	5277.63
DEPOT ROAD				
5	BP	0+00.00	5046.68	5010.42
6	PI	2+09.56	4953.60	5198.18
7	EP	3+34.53	4881.64	5300.77
ARBOR LANE				
8	BP	5+00.00	4913.96	5254.33
9	EP	5+65.71	4856.33	5222.77

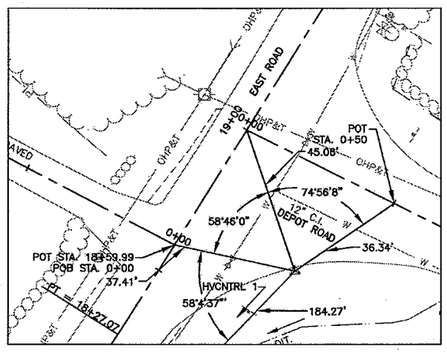
TRAVERSE TIES





ALIGNMENT TIES





DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
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TIE SHEET

DRAWN BY	DATE
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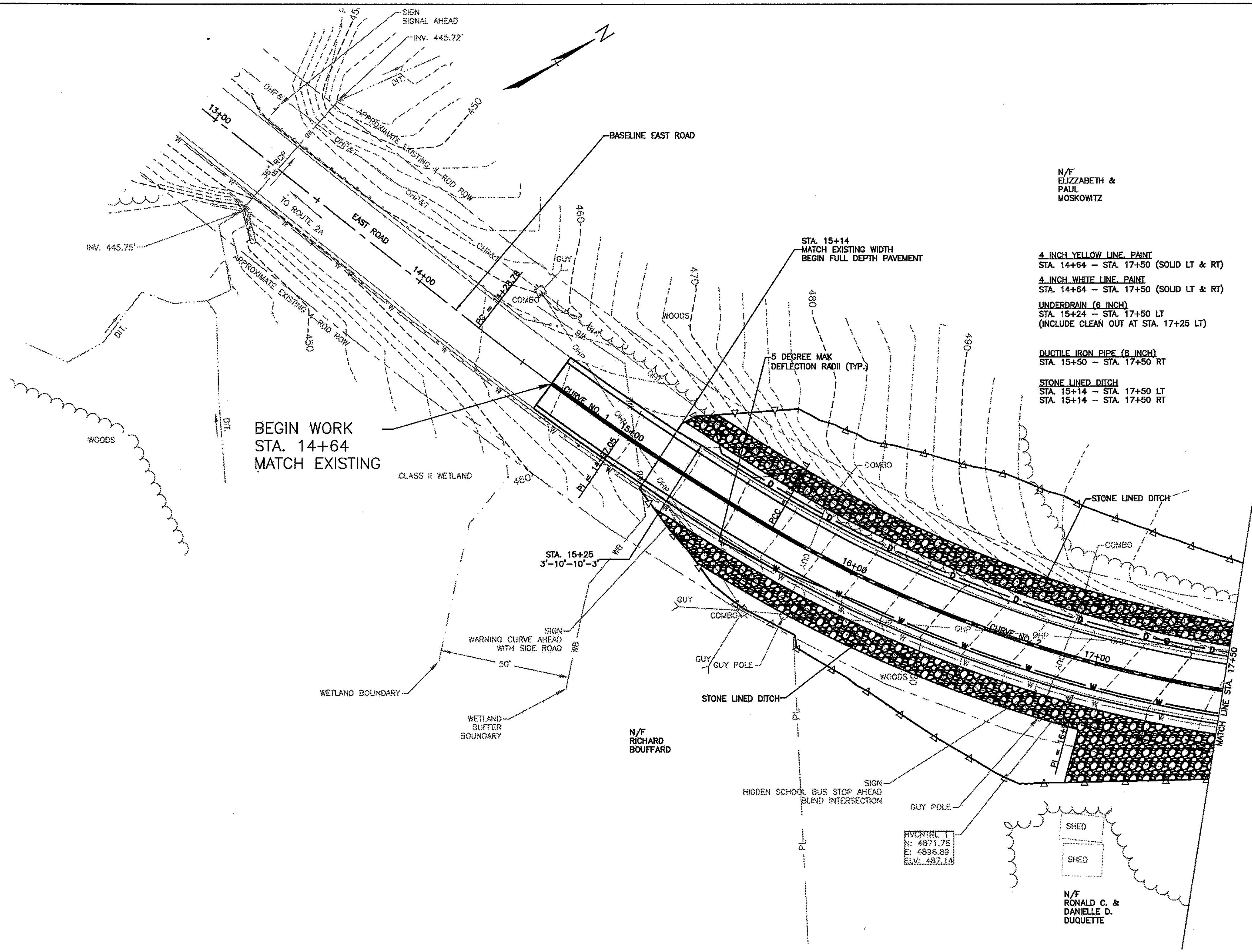
CURVE DATA

CURVE NO. 1
P.I. STA. 14+97.05
N = 4777.2621
E = 4721.0647
Δ = 07°48'39"
R = 1000.00
T = 68.27
L = 136.32
E = 2.33

CURVE NO. 2
P.I. STA. 16+99.17
N = 4871.5370
E = 4900.0866
Δ = 30°01'06"
R = 500.00
T = 134.06
L = 261.96
E = 17.66



LEGEND

EXISTING

- RIGHT OF WAY
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- FENCE
- WATERLINE
- GUARD RAIL
- CONTOUR (10')
- CONTOUR (2')
- HEDGE
- TREE LINE
- TREE
- UTILITY POLE
- GUY WIRE
- HYDRANT
- VALVE
- MAIL BOX
- SIGN

NEW

- TOP OF CUT
- EDGE OF PAVEMENT
- BASELINE
- UNDERDRAIN
- WATERLINE
- STORM DRAIN
- STONE FILL

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

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engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

LAYOUT PLAN NO. 1

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EPD	

LEGEND

EXISTING

NEW

TOP OF CUT	RIGHT OF WAY
EDGE OF PAVEMENT	EDGE OF PAVEMENT
BASELINE	EDGE OF GRAVEL
D — UNDERDRAIN	FENCE
W — WATERLINE	WATERLINE
SD — STORM DRAIN	GUARD RAIL
STONE FILL	CONTOUR (10')
	CONTOUR (2')
	HEDGE
	TREE LINE
	TREE
	UTILITY POLE
	GUY WIRE
	HYDRANT
	VALVE
	MAIL BOX
	SIGN

EXISTING HOUSE

N/F
ELIZZABETH &
PAUL
MOSKOWITZ

4 INCH YELLOW LINE, PAINT
STA. 17+50 – STA. 22+62 (SOLID LT & RT)
(WITH CENTERLINE BREAKS AT TOWN HIGHWAYS)
STA. 0+22 – STA. 1+00 (SOLID LT & RT)

4 INCH WHITE LINE, PAINT
STA. 17+50 – STA. 22+62 (SOLID LT)
STA. 17+50 – STA. 18+25 (SOLID RT)
STA. 19+59 – STA. 22+62 (SOLID RT)
STA. 0+02 – STA. 1+00 (SOLID RT)
STA. 0+16 – STA. 1+00 (SOLID LT)

24 INCH STOP BAR, PAINT
STA. 19+02 – STA. 19+16 RT

UNDERDRAIN (6 INCH)
STA. 17+50 – STA. 19+50 LT
(INCLUDE CLEAN OUT AT STA. 19+50 LT)

DUCTILE IRON PIPE (8 INCH)
STA. 17+50 – STA. 21+50 RT

DUCTILE IRON PIPE (12 INCH)
STA. 0+08 – STA. 1+00 RT

CONCRETE CURB
STA. 18+58 RT (EAST ROAD) – STA. 1+00 RT (DEPOT ROAD)
STA. 1+00 LT (DEPOT ROAD) – STA. 20+50 RT (EAST ROAD)

617.10 RELOCATE MAILBOX, SINGLE SUPPORT
STA. 18+44 LT
STA. 21+39 LT

STONE LINED DITCH
STA. 17+50 – STA. 18+42 LT
STA. 17+50 – STA. 18+50 RT

N/F
DORIS PECOR

629.30 REMOVE HYDRANT
STA. 19+48 RT

HYDRANT ASSEMBLY
STA. 20+00 RT

TAPPING SLEEVE AND VALVE
STA. 18+83 RT
STA. 19+03 RT
STA. 0+18 RT

619.17 YIELDING MARKER POSTS
STA. 17+50 RT

WATER SERVICE CONNECTION
STA. 19+51 RT

N/F
DORIS PECOR

END DRIVEWAY RECONSTRUCTION
STA. 0+63.57

REMOVE EXISTING PAVEMENT AND SUBBASE, REGRADE DRIVE AND INSTALL NEW GRAVEL AND PAVEMENT

GRASS LINED DITCH

CONCRETE THRUST BLOCK (TYP.) CONSIDERED INCIDENTAL TO APPLICABLE PAY ITEMS

STONE LINED DITCH

SIGN
SPEED LIMIT 25

WOODS

EAST ROAD ℄ STA. 19+00.00
DEPOT ROAD ℄ STA. 0+00.00

TELEPHONE VAULT

REMOVE AND RESET IRON PIN
END 6" UNDERDRAIN
STA. 19+50

GRASS LINED DITCH

INV. 499.65'
COMBO

INV. 500.15'

GUY

COMBO

OHP&T

GS

D

R15'

MATCH LINE STA. 17+50

18+00

19+00

20+00

21+00

22+00

23+00

EAST ROAD

W

SD

HYD

12" C.I.

6" C.I.

PAVED

TO MILTON

GRAVEL

SIGN
ARROW WITH
CLUSTERS
GUY POLE
STONE LINED DITCH

N/F
RONALD C. & DANIELLE D. DUQUETTE

DEPOT RD

SIGN
STOP

R40'

R10'

LOCUST

15" LOCUST

REMOVE TREE

SIGN
LEGAL LOAD
LIMIT 24000 LBS

20" LOCUST

CHERRY

WOODS

APPROXIMATE EXISTING 4-ROD ROW

GRASS LINED DITCH

STA. 21+95
3'-10'-10'-3'
5 DEGREE MAX
DEFLECTION RADII (TYP.)

STA. 22+12
MATCH EXISTING WIDTH
END FULL DEPTH PAVEMENT

BASELINE EAST ROAD

N/F
ROBERT T. MARTIN
&
TRICIA A. ROY

REMOVE EXISTING 15" CMP

15" CMP

EXISTING
HOUSE

N/F
THOMAS E. &
CHRISTINA A.
INSLEE

INV. 500.15'
BASELINE DEPOT ROAD

HVCONTRL 1
N: 5004.08
E: 5025.13
ELV: 500.86
INV. 499.61'

EXISTING
POOL

MATCH LINE STA. 1+00

EAST ROAD ℄ STA. 18+59.99
DRIVEWAY ℄ STA. 0+00.00

REGRADE DRIVE AND INSTALL GRAVEL AND PAVEMENT TO ROW LIMITS

SIGN
SLIPPERY ROAD

GRAVEL

SIGN
CURVE AHEAD WITH
SIDE ROAD

APPROXIMATE EXISTING 4-ROD ROW

COMBO

OHP&T

480

500

END WORK
STA. 22+62
MATCH
EXISTING

PL

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

LAYOUT PLAN NO. 2

DRAWN BY EBS	DATE JUNE 2012
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PROJ. ENG. EPD	DRAW. NO.

SHEET 13 OF 38

CURVE DATA

CURVE NO. 3
P.I. STA. 2+09.56
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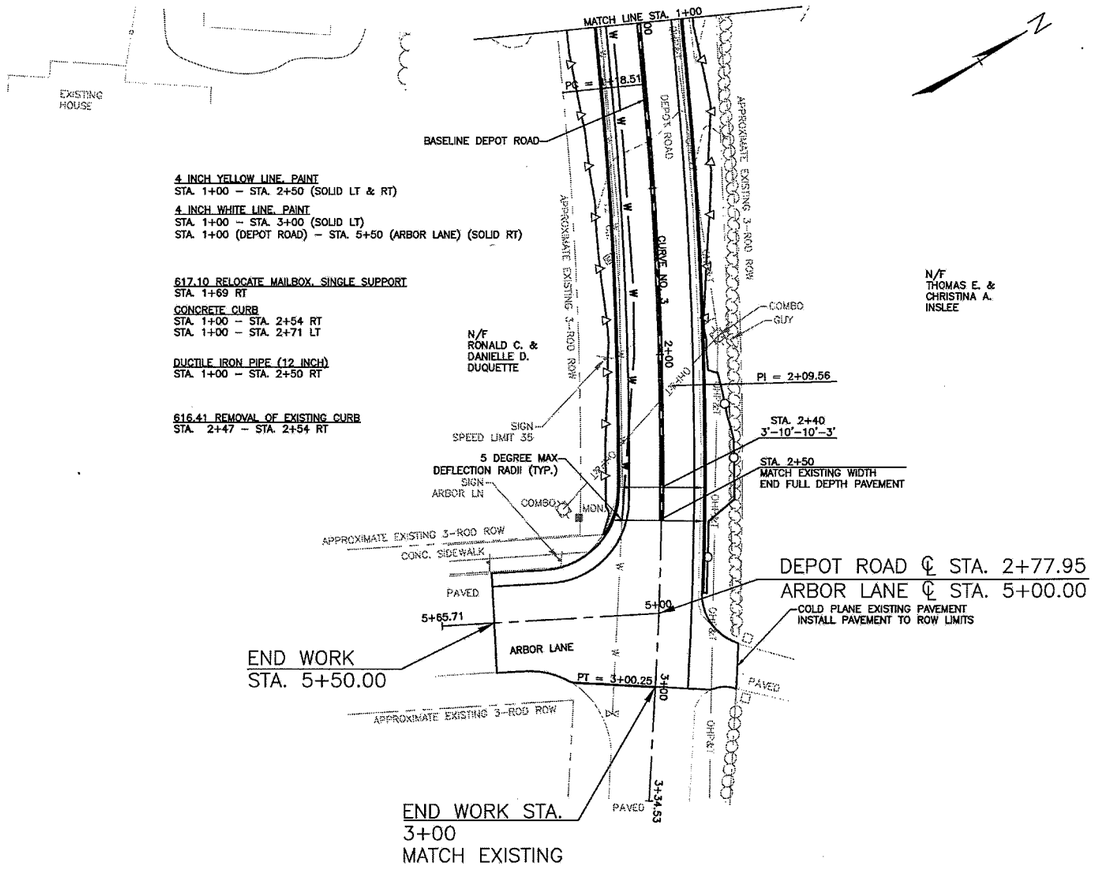

LEGEND

EXISTING

- RIGHT OF WAY
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- FENCE
- WATERLINE
- GUARD RAIL
- CONTOUR (10')
- CONTOUR (2')
- HEDGE
- TREE LINE
- TREE
- UTILITY POLE
- GUY WIRE
- HYDRANT
- VALVE
- MAIL BOX
- SIGN

NEW

- TOP OF CUT
- EDGE OF PAVEMENT
- BASELINE
- D — UNDERDRAIN
- W — WATERLINE
- SD — STORM DRAIN
- STONE FILL

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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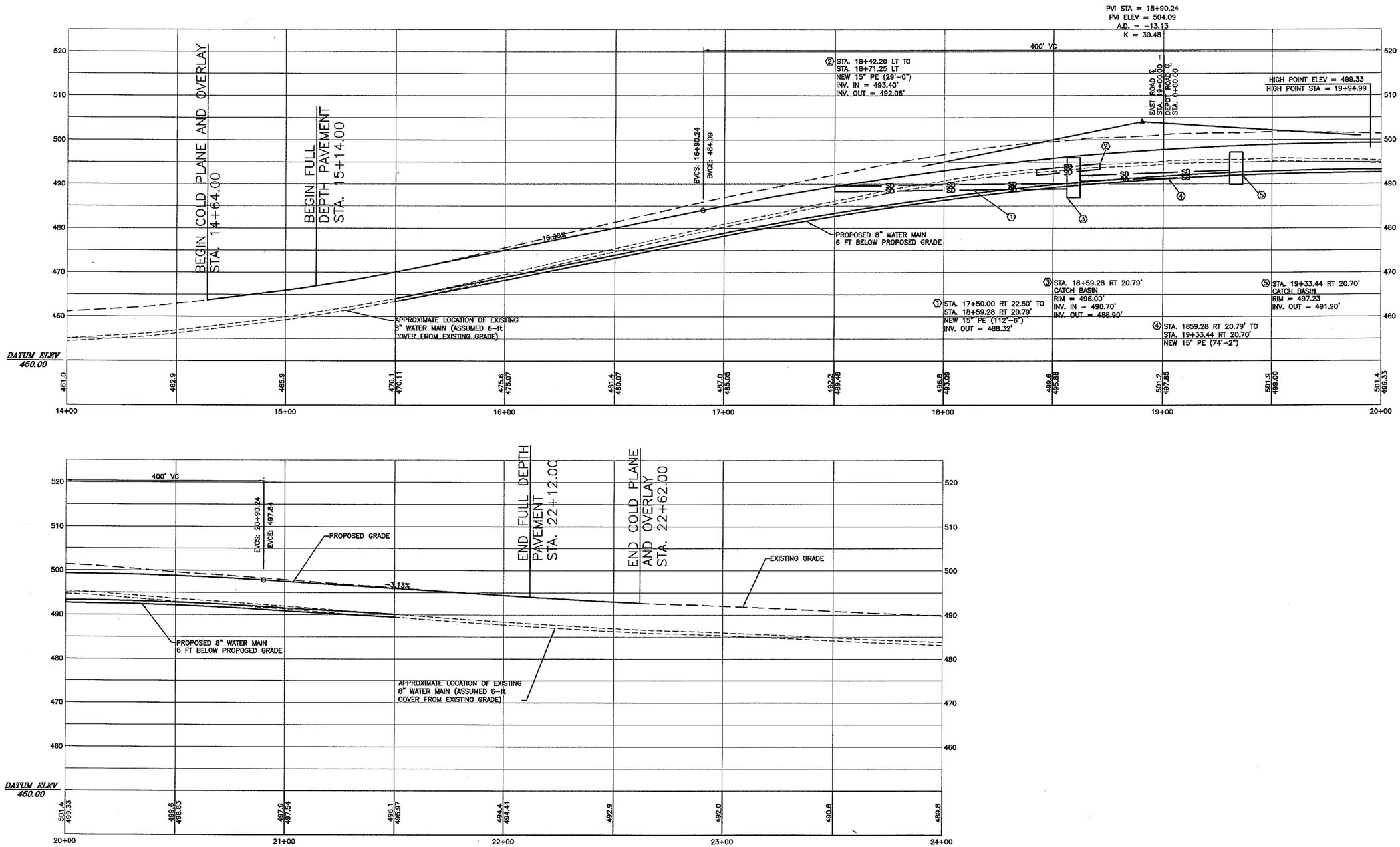

EAST ROAD PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 10'

20 10 0 20 60
SCALE IN FEET

DATUM
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HORIZONTAL ASSUMED

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engineering planning management development

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COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
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EAST ROAD PROFILE

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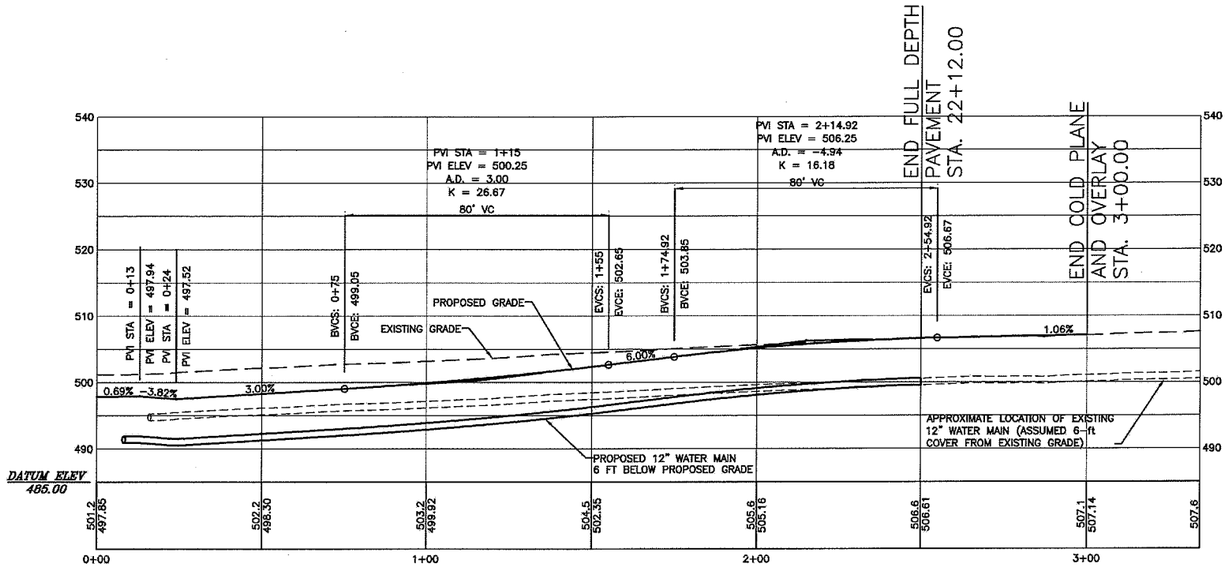
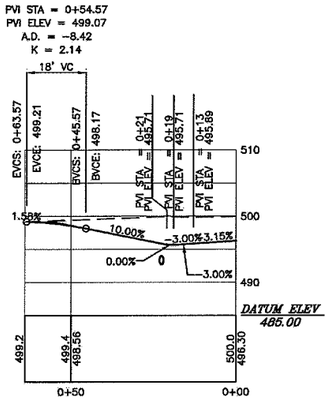


DEPOT ROAD PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 10'



STA. 18+59.99 LT DRIVE PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 10'

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
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DEPOT ROAD PROFILE

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EPD	

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CURVE DATA

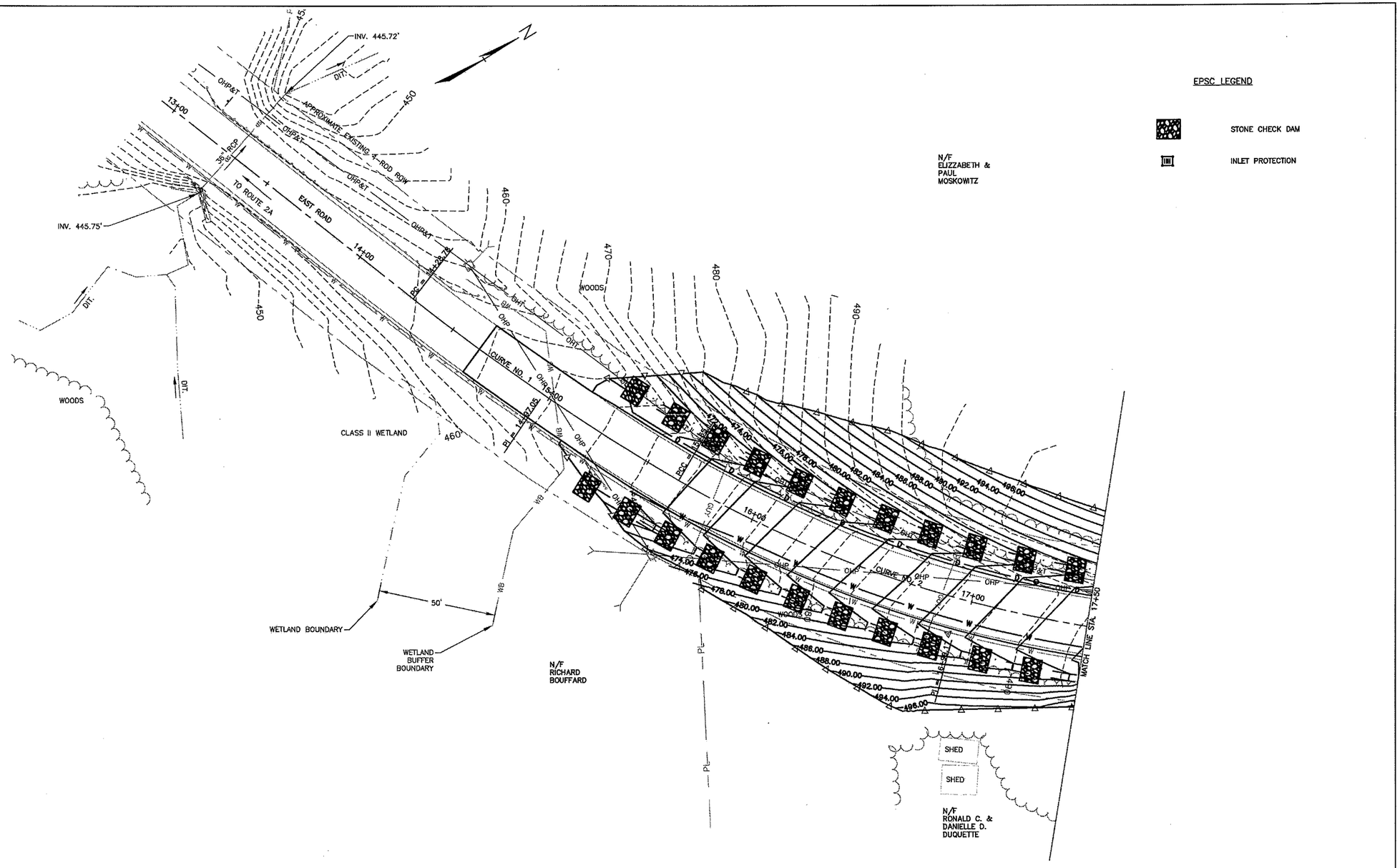
CURVE NO. 1
P.I. STA. 14+97.05
N = 4777.2821
E = 4721.0647
Δ = 07°48'39"
R = 1000.00
T = 68.27
L = 136.32
E = 2.33

CURVE NO. 2
P.I. STA. 16+99.17
N = 4871.5370
E = 4900.0866
Δ = 30°01'06"
R = 500.00
T = 134.06
L = 261.96
E = 17.66

EPSC LEGEND

STONE CHECK DAM

INLET PROTECTION



DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

DuBois & King inc.
engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS
EROSION PREVENTION, SEDIMENT CONTROL AND DRAINAGE PLAN NO. 1

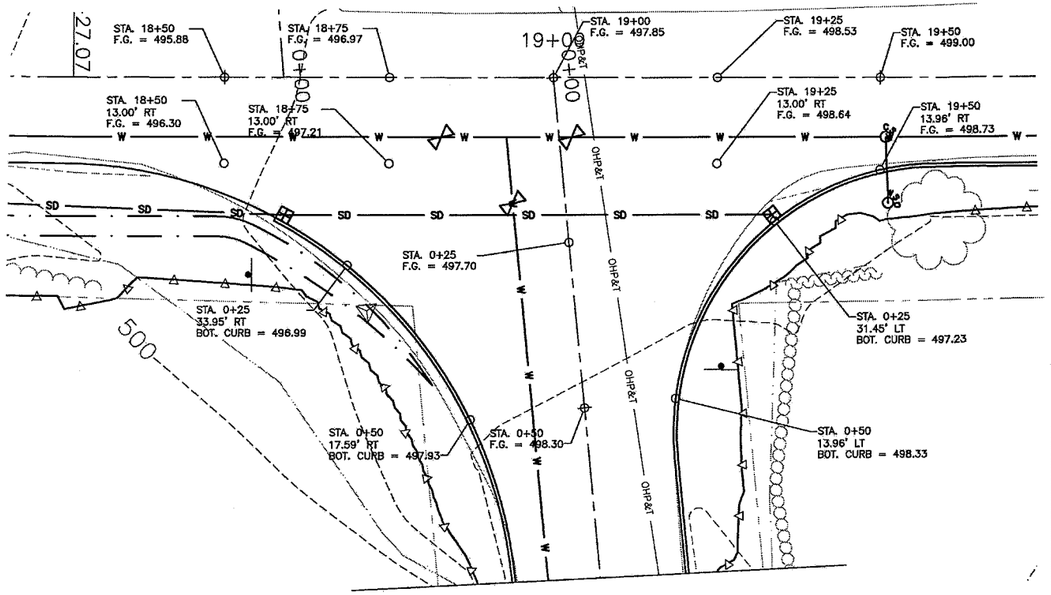
DRAWN BY	DATE
EBS	JUNE 2012
CHECKED BY	PROJ. NO.
EPD	220006
PROJ. ENG.	DRAW. NO.
EPD	

SHEET 17 OF 38

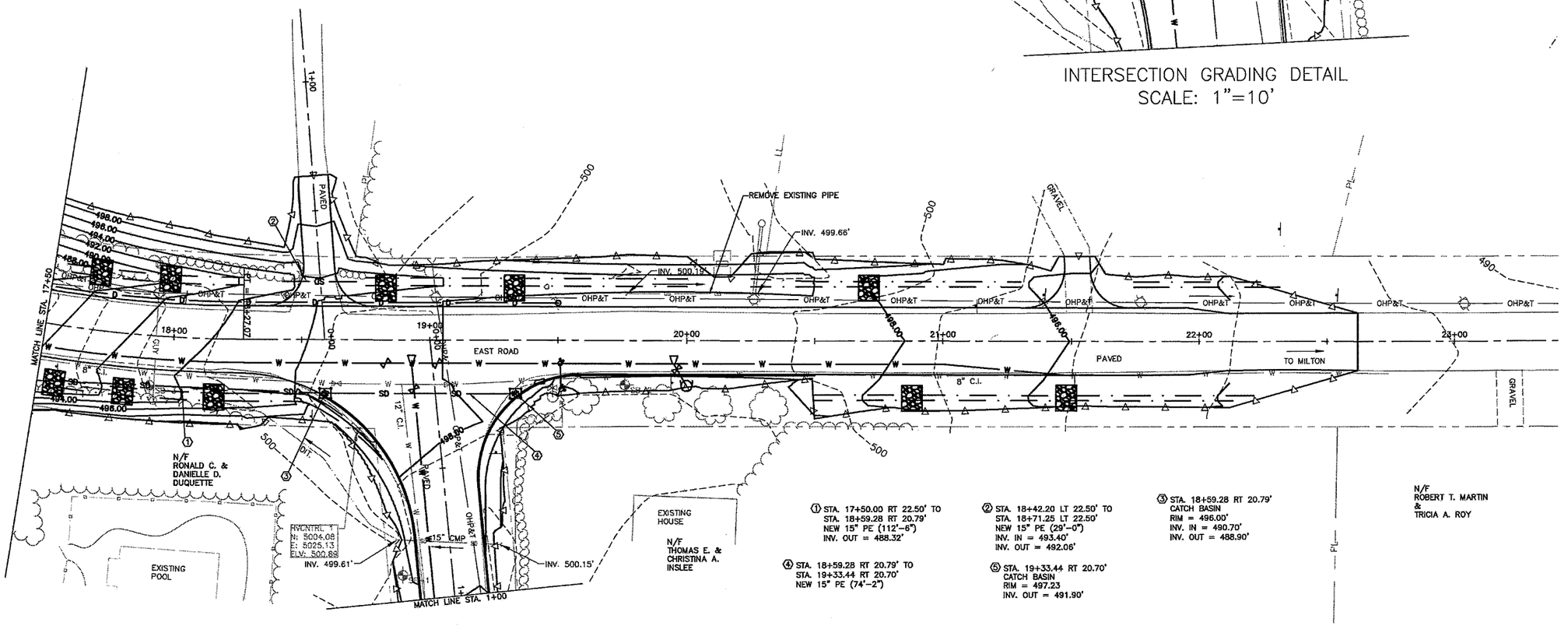
EPSC LEGEND

STONE CHECK DAM

INLET PROTECTION



INTERSECTION GRADING DETAIL
SCALE: 1"=10'



DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

EROSION PREVENTION, SEDIMENT CONTROL AND DRAINAGE PLAN NO. 2

DRAWN BY	DATE
EBS	JUNE 2012
CHECKED BY	PROJ. NO.
EPD	220006
PROJ. ENG.	DRAW. NO.
EPD	

SHEET 18 OF 38

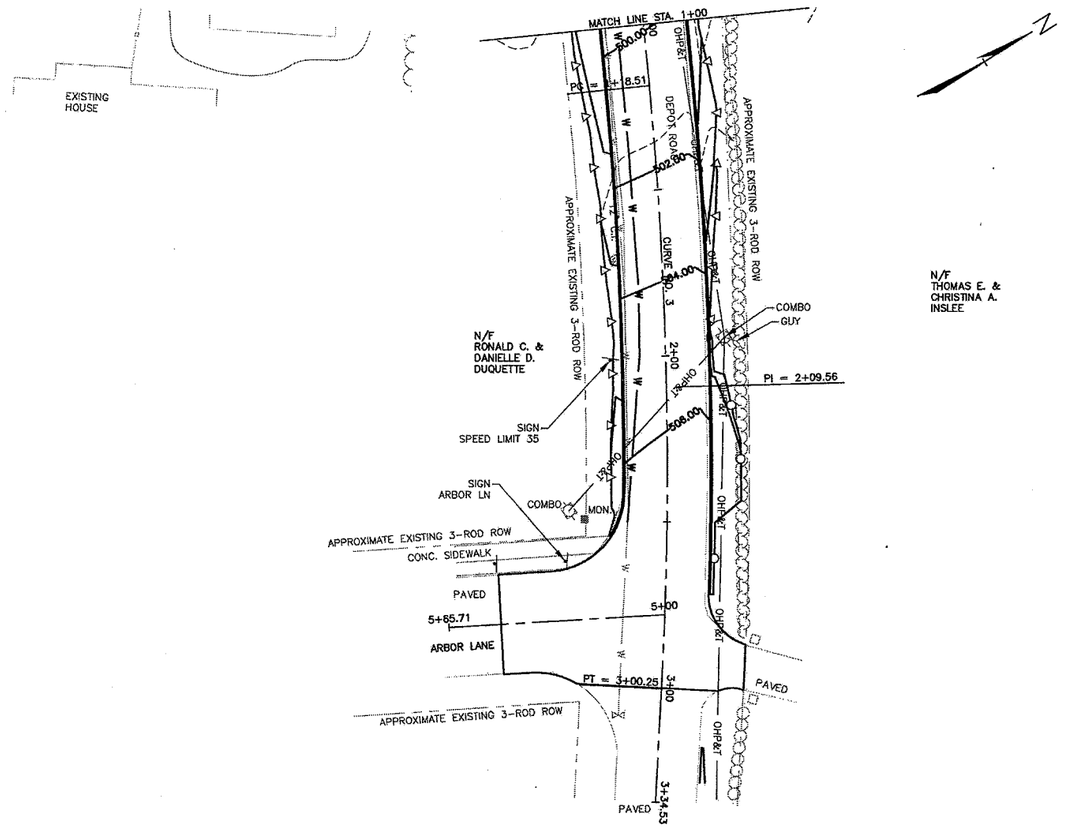
CURVE DATA

CURVE NO. 3
P.I. STA. 2+09.56
N = 4953.6042
E = 5198.1745
Δ = 08°40'39"
R = 1200.00
T = 91.05
L = 181.74
E = 3.45

EPSC LEGEND

STONE CHECK DAM

INLET PROTECTION



DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

20 10 0 20 60
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS
EROSION, PREVENTION, SEDIMENT CONTROL AND DRAINAGE PLAN NO. 3

DRAWN BY	DATE
EBS	JUNE 2012
CHECKED BY	PROJ. NO.
EPD	220006
PROJ. ENG.	DRAW. NO.
EPD	

SHEET 19 OF 38

VAOT RURAL AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

GENERAL GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	19-19-19	PELLETIZED	LIQUID
500 LBS/AC		2 TONS/AC	4.4 GAL/AC

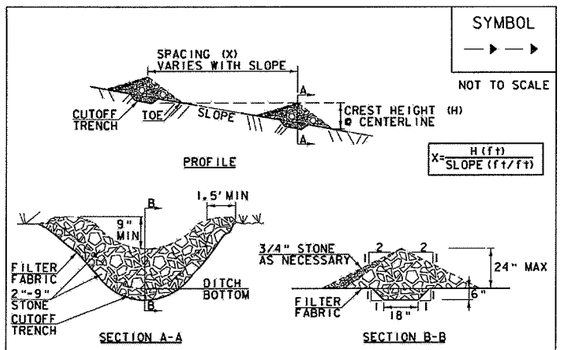
CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANSCAPE MAUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OFTHE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

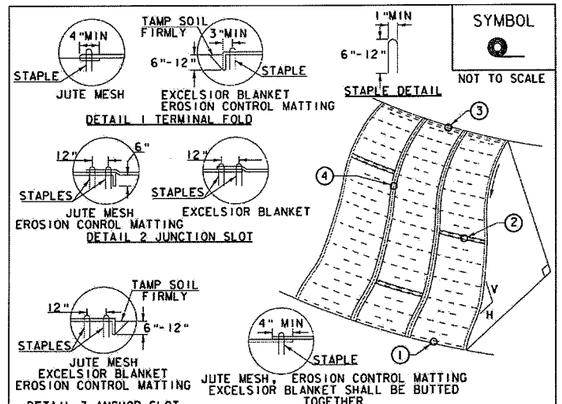
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF



CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

EROSION PREVENTION AND SEDIMENT CONTROL NOTES:

1. EROSION PREVENTION AND SEDIMENT CONTROL SHOULD BE PERFORMED IN ACCORDANCE WITH THE 2006 LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL PUBLISHED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
2. LOCATIONS AND QUANTITIES OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE APPROXIMATE. CONTRACTOR SHOULD ESTABLISH EROSION PREVENTION AND SEDIMENT CONTROL MEASURES BASED UPON FIELD CONDITIONS AND SHOULD REESTABLISH MEASURES BASED UPON CHANGES IN FIELD CONDITIONS OR AS DIRECTED BY THE RESIDENT ENGINEER.

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HORIZONTAL ASSUMED

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

EPSC DETAILS AND NOTES SHEET 1

DRAWN BY	DATE
EBS	JUNE 2012
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EPD	

SHEET 20 OF 38

EROSION CONTROL NOTES

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL PROVISIONS CONTAINING IMPORTANT EROSION CONTROL REQUIREMENTS.

2. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF DISTURBED SOIL EXPOSED TO EROSION FROM WIND AND WATER USING VEGETATIVE AND STRUCTURAL CONTROLS AND PROPER TIMING AND SEQUENCING OF CONSTRUCTION ACTIVITIES, AS SPECIFIED IN THE EROSION PREVENTION & SEDIMENT CONTROL PLAN IN THE SPECIAL PROVISIONS.

3. DIVERT OFF-SITE STORM WATER RUNOFF FROM HIGHLY ERODIBLE AREAS AND STEEP SLOPES AND CONVEY OFF-SITE STORM WATER TO STABLE AREAS. INSTALL NECESSARY EROSION PREVENTION & SEDIMENT CONTROL PRACTICES AS WORK TAKES PLACE.

4. THE CONTRACTOR SHALL DESIGNATE THE RESPONSIBILITIES FOR IMPLEMENTING THE EROSION PREVENTION & SEDIMENT CONTROL PLAN TO ONE INDIVIDUAL. THE CONTRACTOR SHALL ENSURE THAT ALL WORKERS UNDERSTAND THE MAJOR PROVISIONS OF THE EROSION PREVENTION & SEDIMENT CONTROL PLAN. PHYSICALLY MARK OFF LIMITS OF NECESSARY ON-SITE LAND DISTURBANCE WITH TAPE, SILT FENCE, OR OTHER METHODS AND REVIEW WITH WORKERS AND SUBCONTRACTORS SO THAT ALL WORKERS CAN SEE THE AREAS TO BE PROTECTED.

5. APPLY TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETED.

6. ALL EARTH STOCKPILES SHALL BE PROTECTED BY A SILT FENCE AT THE PERIMETER AND COVERED WITH A BLANKET OF HAY MULCH.

7. STONE CHECK DAMS SHALL BE INSTALLED AS INDICATED AND WHERE DESIGNATED ON THE PLANS AND AS NECESSARY TO PREVENT EROSION DAMAGE FROM ANY CONSTRUCTION ACTIVITY.

8. STONE CHECK DAMS SHALL REMAIN IN PLACE UNTIL PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

9. STONE CHECK DAMS SHALL BE PERIODICALLY INSPECTED TO INSURE THEY ARE IN GOOD CONDITION AND THAT AN EXCESSIVE BUILDUP OF SILT AND DEBRIS HAS NOT OCCURRED. NOTWITHSTANDING PERIODIC INSPECTIONS, STONE CHECK DAMS SHALL BE INSPECTED BEFORE AND AFTER RAINFALL EVENTS TO INSURE THEY ARE IN GOOD CONDITION BEFORE RAINFALL AND TO REMOVE EXCESSIVE BUILDUP OF SILT AND DEBRIS AFTER THE STORM EVENT.

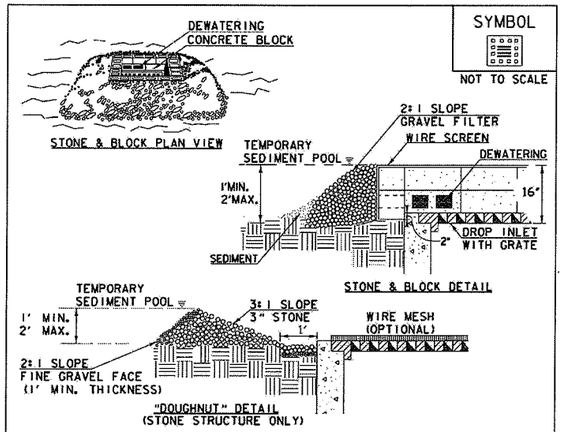
10. SLOPED SURFACES SHALL BE ROUGHENED BY DRIVING TRACKED EQUIPMENT UP AND DOWN THE SLOPE AFTER SEEDING AND MULCHING IS COMPLETED. THE GROOVES CREATED BY THE TRACKED CONSTRUCTION EQUIPMENT SHALL RUN ACROSS THE SLOPE HORIZONTALLY AND NOT UP AND DOWN THE SLOPE.

11. THE "VERMONT LOW RISK SITE HANDBOOK", DATED AUGUST 2006, SHALL BE UTILIZED AS A GUIDE FOR THE CONTROL OF EROSION AND SEDIMENT ON THE SITE. THE CONTRACTOR SHALL BE FAMILIAR WITH THE STANDARDS AND SPECIFICATIONS IN THIS PUBLICATION.

12. PERMANENT STABILIZATION MEASURES (SEED, STONE, ETC.) SHALL BE PLACED WITHIN 48 HOURS AFTER FINAL GRADING HAS BEEN COMPLETED. EXPOSED EARTH AREAS WILL BE TEMPORARILY STABILIZED SEEDED, MULCHED, OR MATTED) AT A MAXIMUM OF EVERY TWO WEEKS, UNLESS THE AREA IS BEING ACTUALLY WORKED ON.

13. THE TEMPORARY EASEMENT LIMIT SHALL BE MARKED IN THE FIELD AT EVEN 100-FOOT STATIONS (LEFT AND RIGHT) PRIOR TO ANY EXCAVATION OR FILLING OPERATIONS. THE MARKER SHALL BE GRADE STAKES WITH FLAGGING INDICATING THE STATION AND OFFSET DISTANCE. PAYMENT TO INSTALL AND MAINTAIN THE STAKES SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 635.11, "MOBILIZATION/DEMOBILIZATION".

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

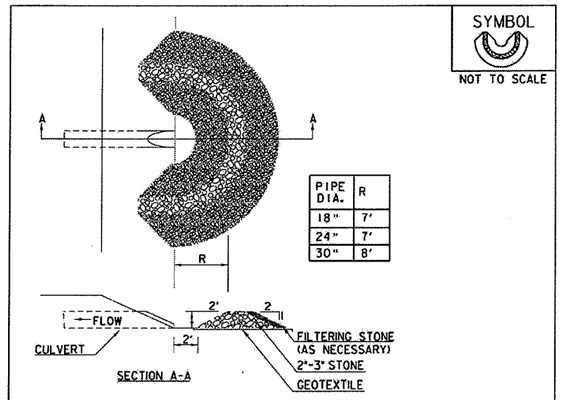
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½"- ¾" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STONE & BLOCK DROP INLET PROTECTION

NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- ' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
3. ONCE THE AREAS UPSTREAM FROM THE CHECK DAM ARE STABILIZED WITH VEGETATION, THE SEDIMENT TRAPPED BEHIND THE DAM SHAL BE DISPOSED OF IN AN APPROVED WASTE AREA.
4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE . (GEOTEXTILE MUST BE REMOVED).
5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.
6. THE AREA CONTRIBUTING TO THE CHECK DAM SHALL NOT EXCEED 4 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS ORIGINALLY DEVELOPED BY USDA-NRCS	PIPE INLET PROTECTION

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
COLCHESTER, VERMONT

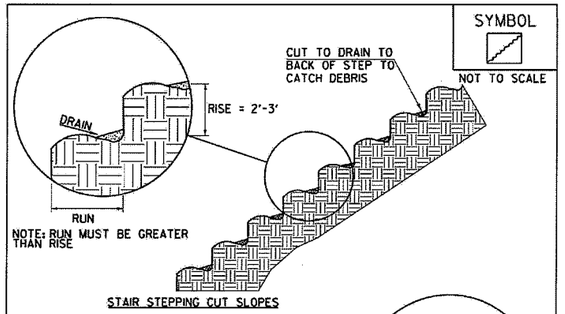
EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

EPSC DETAILS AND NOTES SHEET 2

DRAWN BY EBS	DATE JUNE 2012
CHECKED BY EPD	PROJ. NO. 220006
PROJ. ENG. EPD	DRAW. NO.

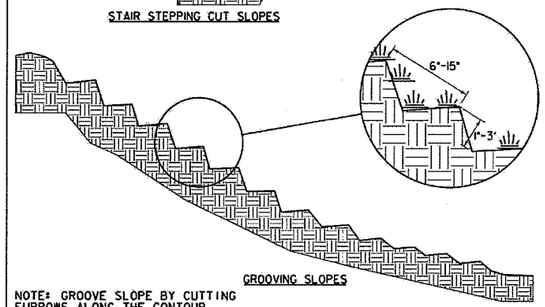
SYMBOL

NOT TO SCALE



NOTE: RUN MUST BE GREATER THAN RISE

STAIR STEPPING CUT SLOPES



GROOVING SLOPES

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURFACE ROUGHENING

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

EPSC DETAILS AND NOTES SHEET 3

DRAWN BY EBS	DATE JUNE 2012
CHECKED BY EPD	PROJ. NO. 220006
PROJ. ENG. EPD	DRAW. NO.

LEGEND

EXISTING

NEW

TOP OF CUT	RIGHT OF WAY
EDGE OF PAVEMENT	EDGE OF PAVEMENT
BASELINE	EDGE OF GRAVEL
D — UNDERDRAIN	FENCE
W — WATERLINE	WATERLINE
SD — STORM DRAIN	GUARD RAIL
STONE FILL	CONTOUR (10')
	CONTOUR (2')
	HEDGE
	TREE LINE
	TREE
	UTILITY POLE
	GUY WIRE
	HYDRANT
	VALVE
	MAIL BOX
	SIGN

SPECIAL PROVISION (VINYL FENCE, 6 FEET)
STA. 17+16.31 – STA. 0+66.16 RT

NOTE:
PROPOSED PLANTING SHALL NOT BE PLACED WITHIN 12 FEET FROM ANY EXISTING OR PROPOSED UTILITY POLES OR CABLES.

9 PS
1 QR
1 AL
1 QR
3 PS
1 QR
5 PS
1 AL
1 QR

N/F
ELIZZABETH & PAUL MOSKOWITZ

WOODS

STA. 16+50

17+00

18+00

PI = 16+99.17

PT = 18+27.07

1+00

PAVED

19+00

0+00

EAST ROAD

STA. 19+50

8" C.I.

WOODS

12" C.I.

STA. 0+50

CERTAINTEED BUFFTECH VINYL PRIVACY FENCE,
6' CHESTERFIELD CERTAGRAIN, SIERRABLEND
(MEDIUM BROWN COLOR)

SHED

SHED

N/F
RONALD C. & DANIELLE D. DUQUETTE

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

10 5 0 10 30
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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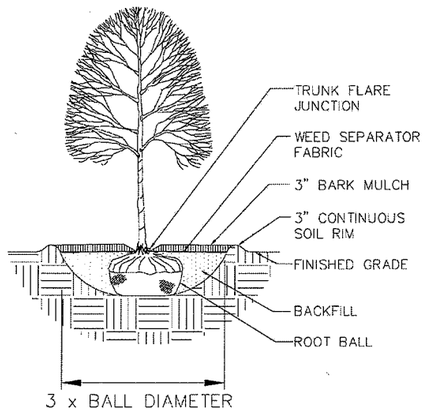
EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

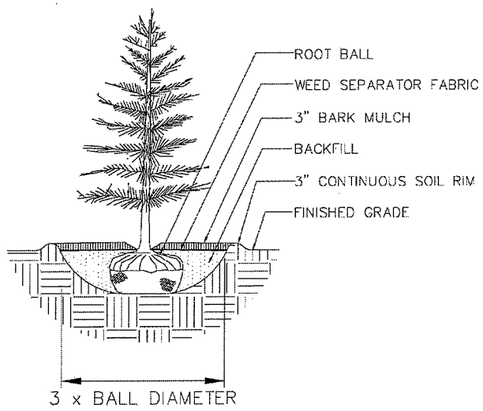
LANDSCAPE PLAN SHEET

DRAWN BY EBS	DATE JUNE 2012
CHECKED BY EPD	PROJ. NO. 220006
PROJ. ENG. EPD	DRAW. NO.

SHEET 23 OF 38



TREE PLANTING DETAIL
NOT TO SCALE



TREE PLANTING DETAIL
NOT TO SCALE

PLANTING TABLE

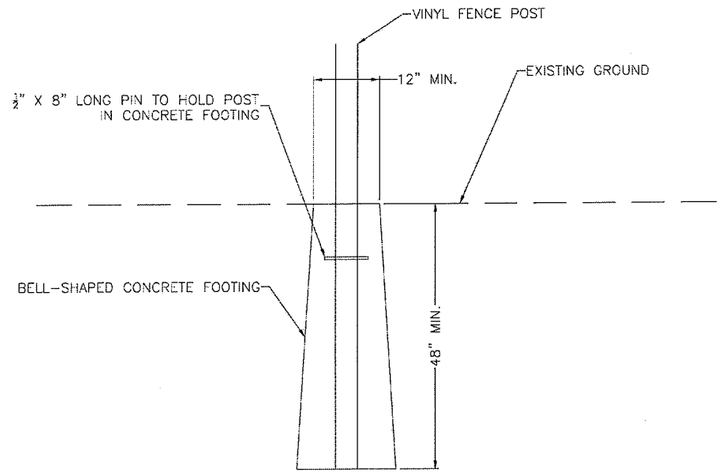
CATEGORY	QUANTITY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	REMARKS	PAY ITEM
DECIDUOUS TREES	4	QR	QUERCUS RUBRA /	1-3/4-2" CAL.	B&B	UNIFORM	LARGE TREES (DECIDUOUS)
			RED OAK				
CONIFEROUS TREES	17	PS	PINUS STROBUS /	5-6' HT.	B&B	UNIFORM	LARGE TREES (CONIFEROUS)
			WHITE PINE				
DECIDUOUS TREES	2	AL	AMELANCHIER LAEVIS /	6-7' HT.	B&B	UNIFORM	SMALL TREES (DECIDUOUS)
			ALLEGHANY SERVICEBERRY				

PLANTING NOTES:

1. PRIOR TO PLANTING, CHECK PLANTS DAILY AND WATER TO KEEP SOIL DAMP BUT NOT SOAKING WET.
2. ANTI DESICANT SPRAY MAY BE APPLIED TO ALL EVERGREENS AS PER MANUFACTURERS SPECIFICATIONS.
3. PLANT TREES AND SHRUBS SO THAT THE ROOT BALL FIRMLY ON TOP OF UNDISTURBED SOIL WITH THE JUNCTION TRUNK FLARE SLIGHTLY HIGHER (1-2") THAN THE FINISHED GRADE.
4. REMOVE TWINE AND BURLAP FROM TOP 1/3 OF BALL. IF SYNTHETIC, REMOVE COMPLETELY. REMOVE THE HALF OF WIRE BASKET AND CUT THE REMINDER IN NUMEROUS PLACES.
5. BACKFILL WITH SUITABLE SOIL FROM HOLE. AMEND WITH TOPSOIL AND COMPOST AS DIRECTED BY THE ENGINEER. LIGHTLY TAMP BACKFILL IN LAYERS TO REMOVE AIR POCKETS AND WATER THOROUGHLY WITHIN 48 HOURS OF PLANTING.
6. USE AGED, UNCOLORED DOUBLE SHREDDED BARK MULCH.TAPER MULCH TO BASE OF TRUNK.
7. STAKE AND GUY TREES WHEN NECESSARY TO STABILIZE ROOT BALL IN LOOSE SOIL OR HIGH WINDS AS DIRECTED BY THE ENGINEER. REMOVE ALL STAKES AND GUY MATERIALS ONE YEAR AFTER PLANTING.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO ALL EXISTING TREES, SHRUBS, WETLAND, TURF AND OTHER VEGETATED AREAS WITHIN THE CONSTRUCTION EASEMENT DURING THE PROJECT CONSTRUCTION PERIOD.
2. LIMITS OF ALL LANDSCAPE CONSTRUCTION ACTIVITIES SHALL NOT ENCROACH WITHIN 10 FEET OF ANY EXISTING TREE LINE UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.
3. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SPECIFIED, WITHIN 2 WEEKS OF FINAL GRADING UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.
4. ALL PLANTING LOCATIONS SHALL BE STAKED OUT PRIOR TO PLANTING. THE RESIDENT ENGINEER MAY ADJUST THE STAKES, AS NEEDED PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STAKES DURING CONSTRUCTION.
5. ALL LANDSCAPE CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO WITHIN THE LIMITS OF DISTURBANCE AS IDENTIFIED ON THE PLANS OR AS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL NOT PLACE EQUIPMENT OR PERFORM WORK ON ADJACENT PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE LANDOWNER AND RESIDENT ENGINEER.
6. THE CONTRACTOR SHALL VERIFY ALL PLANTING LOCATIONS AND QUANTITIES WITH THE RESIDENT ENGINEER PRIOR TO THE PLANTING. ADJUSTMENTS TO THE PLANTING DESIGN AND LAYOUT MAY BE REQUIRED BASED UPON ACTUAL FIELD CONDITIONS. QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE SUBJECT TO CHANGE.
7. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING VEGETATION OUTSIDE THE LIMITS OF THE CONSTRUCTION EASEMENTS USING PROJECT DEMARCATION FENCE AS DIRECTED BY THE RESIDENT ENGINEER . NO STORAGE OF HEAVY EQUIPMENT OR MATERIAL IS ALLOWED BEYOND THE LIMITS OF CONSTRUCTION.



POST FOUNDATION DETAIL
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Table 6H-2. Meaning of Symbols on Typical Application Diagrams

	Arrow panel
	Arrow panel support or trailer (shown facing down)
	Changeable message sign or support trailer
	Channelizing device
	Crash Cushion
	Direction of temporary traffic detour
	Direction of traffic
	Flagger
	High level warning device (Flag tree)
	Luminaire
	Pavement markings that should be removed for a long term project
	Sign (shown facing left)
	Surveyor
	Temporary barrier
	Temporary barrier with warning lights
	Traffic or Pedestrian signal
	Truck mounted attenuator
	Type III Barricade
	Warning lights
	Work space
	Work vehicle

Figure 6E-1. Use of Hand-Signaling Devices by Flaggers

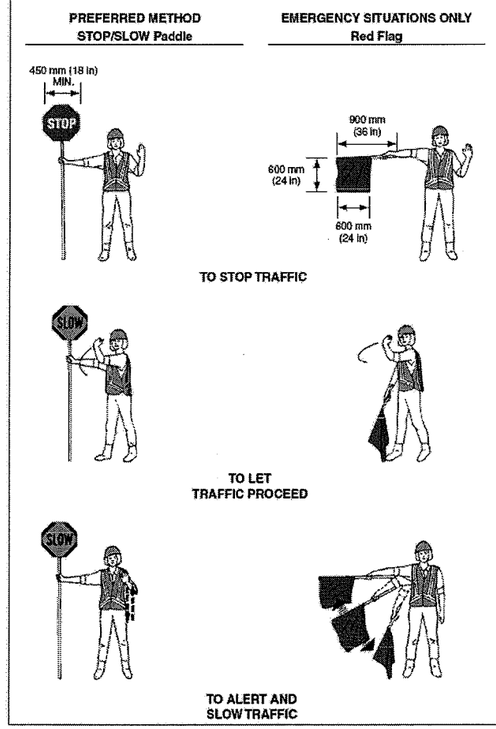
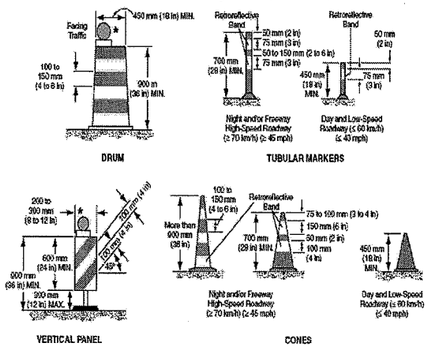


Figure 6F-7. Channelizing Devices (Sheet 1 of 2)



* Warning lights (optional)

Note: If drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices, in order to create a continuous bottom, and the height of each individual drum, cone, or tubular marker shall be no less than 900 mm (36 in) to be detectable to users of long canes.

TRAFFIC CONTROL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THESE PROJECT PLANS, APPLICABLE VTRANS E-SERIES STANDARD DRAWINGS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2009, AND ITS LATEST REVISIONS, OR AS DIRECTED BY THE RESIDENT ENGINEER.
2. THE CONTRACTOR MUST PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES.
3. THE CONTRACTOR SHALL CONDUCT THE WORK AT ALL TIMES IN SUCH A MANNER AND IN SUCH SEQUENCE SO AS TO ENSURE THE LEAST INTERFERENCE WITH TRAFFIC.
4. SIGNS SHALL ONLY BE VISIBLE TO MOTORIST AT THE TIMES WHEN THE MESSAGE IS PERTINENT, I.E. A "FLAGGER AHEAD" SIGN SHALL ONLY BE VISIBLE TO MOTORIST WHEN THE FLAGGER IS ACTUALLY PRESENT PERFORMING THEIR DUTIES.
5. A MINIMUM LANE WIDTH OF 10 FT. SHALL BE MAINTAINED.
6. WHEN COLD PLANED BITUMINOUS PAVEMENT IS OPEN TO TRAFFIC, A "MOTORCYCLES USE CAUTION" SIGN, AS PER VTRANS STANDARD E-102A, SHALL BE PROVIDED.
7. THE CONTRACTOR SHOULD LEAVE NO LONGITUDINAL DROP-OFFS DURING THE OVERNIGHT HOURS.
8. MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES. MAINTAIN ACCESS TO ALL COMMERCIAL AND MUNICIPAL PROPERTIES DURING BUSINESS HOURS. ACCESS TO RESIDENTIAL PROPERTIES MAY BE RESTRICTED FOR A SHORT DURATION (A FEW HOURS). COORDINATE MAJOR WORK ON COMMERCIAL OR MUNICIPAL ACCESSES WITH THE OWNER AT LEAST ONE WEEK PRIOR TO STARTING THE WORK. ALL ACCESSES SHALL ALSO BE KEPT FREE OF WORK AND TRAFFIC CONTROLLED BY UNIFORMED TRAFFIC OFFICERS OR FLAGGERS AS REQUIRED.
9. TRAFFIC SHALL NOT BE CHANGED FROM ONE PHASE TO THE NEXT PHASE UNTIL ALL TEMPORARY MARKINGS AND SIGNING WORK ARE COMPLETED. ANY CONFLICTING MARKINGS SHALL BE REMOVED.
10. ALL PERMANENT SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROL MUST BE COMPLETELY COVERED.
11. PLEASE NOTE THAT THE UTO (UNIFORMED TRAFFIC OFFICER), UNDER AUTHORITY GRANTED BY LAW (TITLE 23 VSA) MAY DIRECT AND CONTROL TRAFFIC. SUITABLE EXAMPLES IN WORK MIGHT INCLUDE THE DIRECTION AND CONTROLS OF TRAFFIC AT INTERSECTIONS WHERE SIGNALS ARE NOT FUNCTIONING OR ARE MALFUNCTIONING. IN THESE CASES, THE PRESENCE OF THE BLUE LIGHT MAY NOT BE SUITABLE OR NECESSARY. THE WEARING OF DEPARTMENTALLY REQUIRED AND APPROVED REFLECTIVE GARMENTS IS REQUIRED.
12. EAST ROAD AND DEPOT ROAD MUST BE KEPT OPEN TO AT LEAST ONE LANE OF TRAFFIC AT ALL TIMES. NEITHER ROAD CAN BE CLOSED AND DETOURED.

INTRODUCTION:

1. UNLESS OTHERWISE NOTED, THE OBJECTIVE OF THIS PLAN IS TO MINIMIZE IMPACT ON THE TRAFFIC FLOW WHILE PROVIDING A SAFE PASSAGE FOR VEHICLES AND PEDESTRIANS DURING AND AFTER CONSTRUCTION WORK HOURS.
2. THE FOLLOWING TRAFFIC CONTROL INFORMATION IS INTENDED TO BE A GENERAL OUTLINE FOR HOW THE WORK SHOULD PROCEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SPECIFIC DETAILS TO ADDRESS SPECIFIC SITUATIONS. THIS RESPONSIBILITY INCLUDES PROVIDING A PLAN DETAILING THE USE AND PLACEMENT OF SIGNS, CHANNELING DEVICES, ARROW PANELS, FLAGGERS AND UNIFORMED TRAFFIC OFFICERS (UTO'S) DURING LANE CLOSURES. IF THE CONTRACTOR DOES NOT WISH TO FOLLOW THIS OUTLINE, THE CONTRACTOR SHALL SUBMIT AN ALTERNATE PROPOSAL TO THE PAVEMENT MANAGEMENT SECTION VIA THE ENGINEER. THE CONTRACTOR MUST ALLOW AT LEAST 4 WEEKS FOR REVIEW AND APPROVAL OF THE COMPREHENSIVE PLAN AND 2 WEEKS FOR REVIEW AND APPROVAL OF MINOR CHANGES/DETAILS. ALL TRAFFIC CONTROL DETAILS MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD AND VTRANS STANDARDS E-100, E-100A, E-101, E-102, E-102A, E-103, E-106, E-107, E-107A, E-108A, E-110, E-111 AND E-112. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

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Figure 6C-2. Types of Tapers and Buffer Spaces

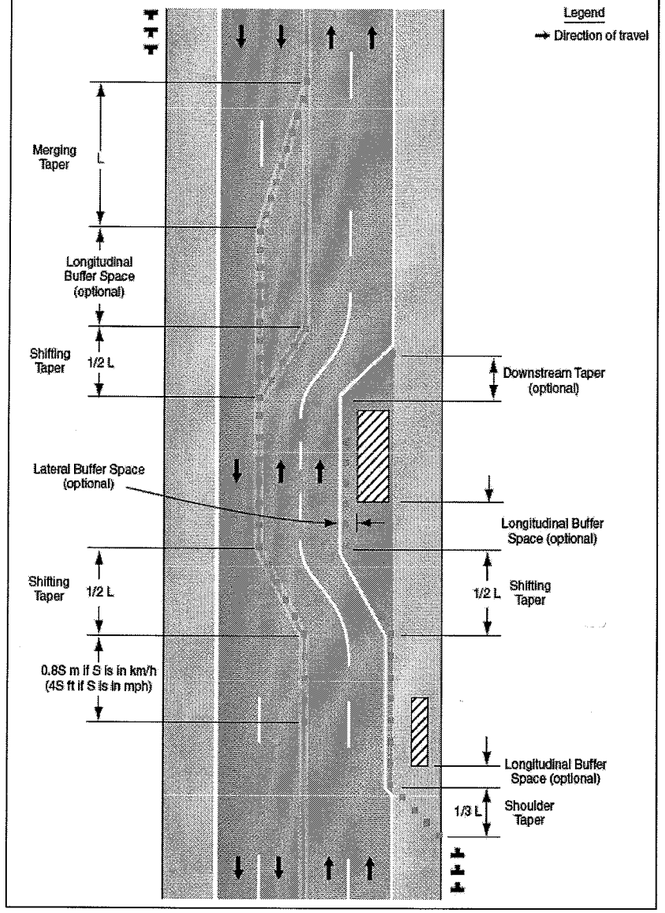
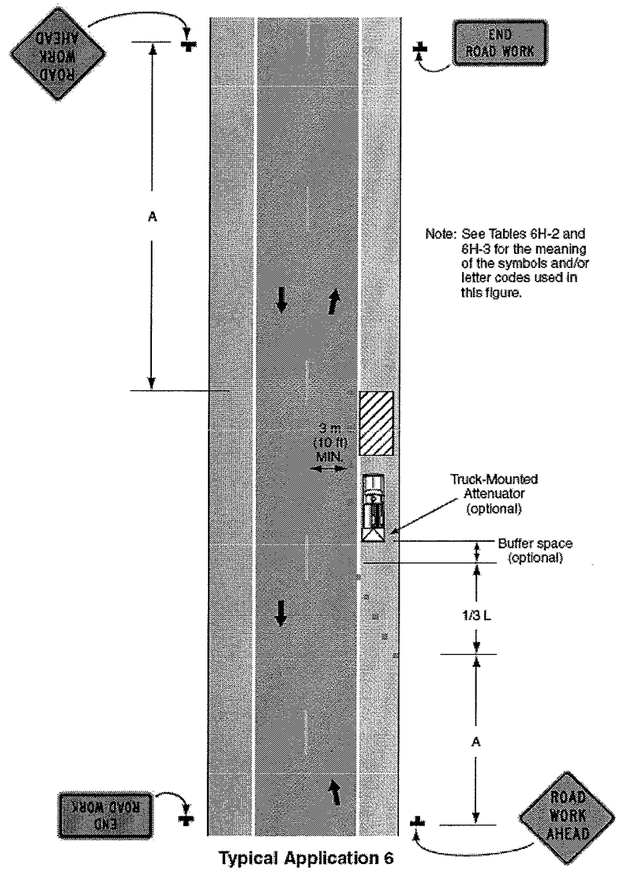
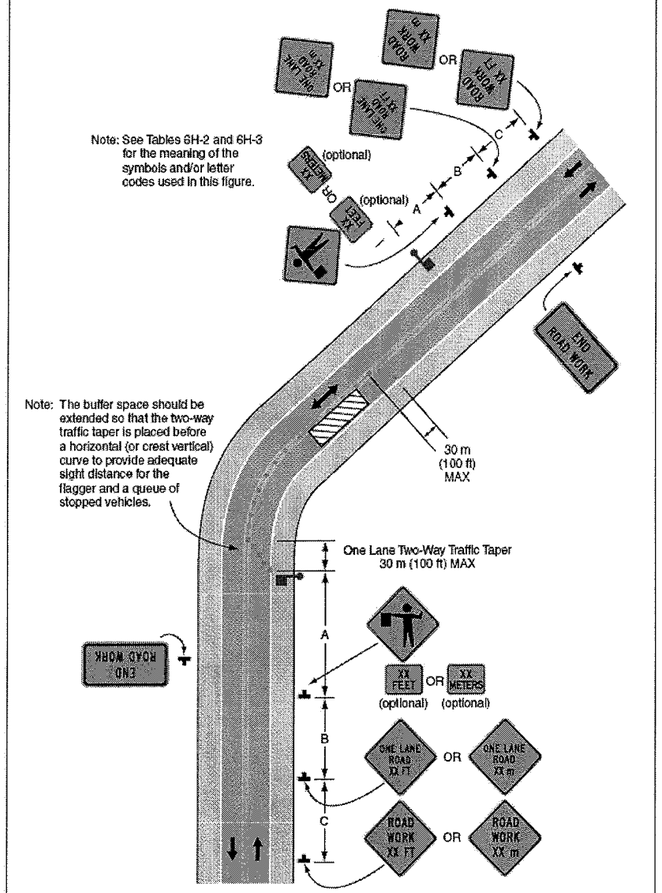


Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



Typical Application 6

Figure 6H-10. Lane Closure on Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length (L)*
Merging Taper	at least L
Shifting Taper	at least 0.5L
Shoulder Taper	at least 0.33L
One-Lane, Two-Way Traffic Taper	30 m (100 ft) maximum
Downstream Taper	30 m (100 ft) per lane

Table 6C-4. Formulas for Determining Taper Lengths

Speed Limit (S)	Taper Length (L) Meters
60 km/h or less	$L = \frac{WS^2}{155}$
70 km/h or more	$L = \frac{WS}{1.6}$

Speed Limit (S)	Taper Length (L) Feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	L = WS

Where: L = taper length in meters (feet)
W = width of offset in meters (feet)
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in km/h (mph)

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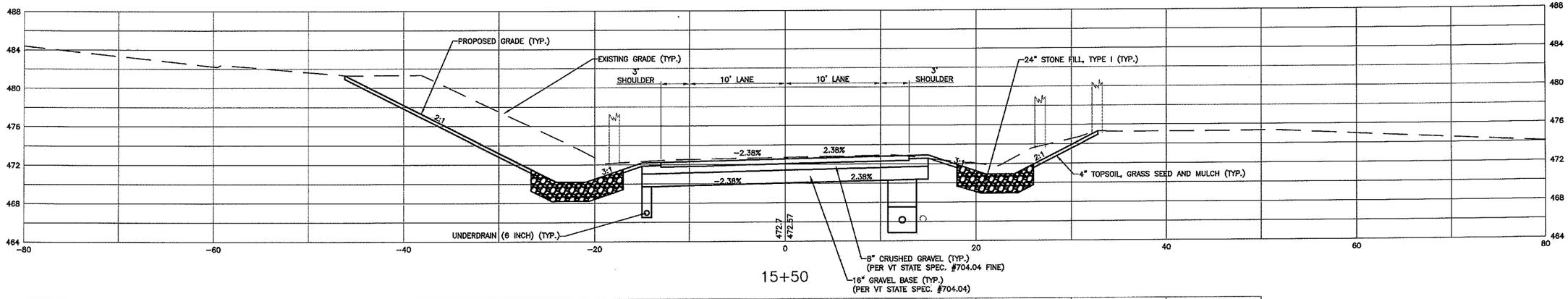

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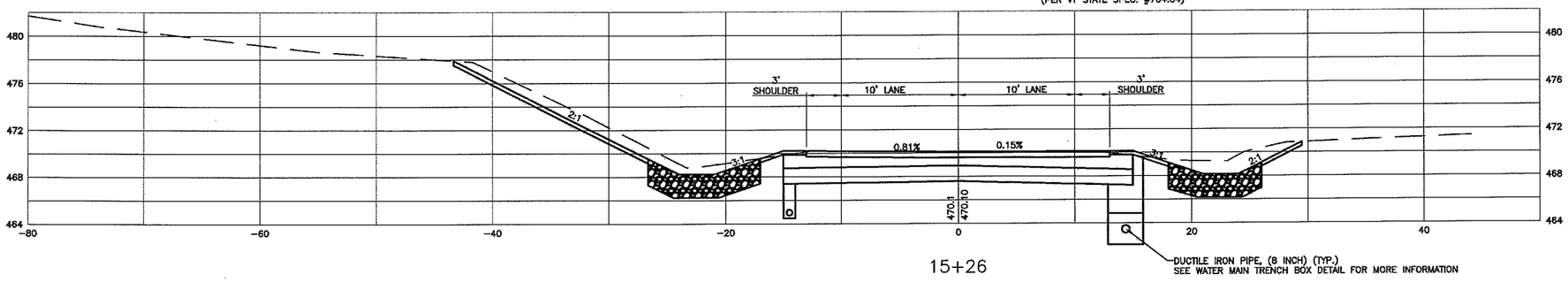

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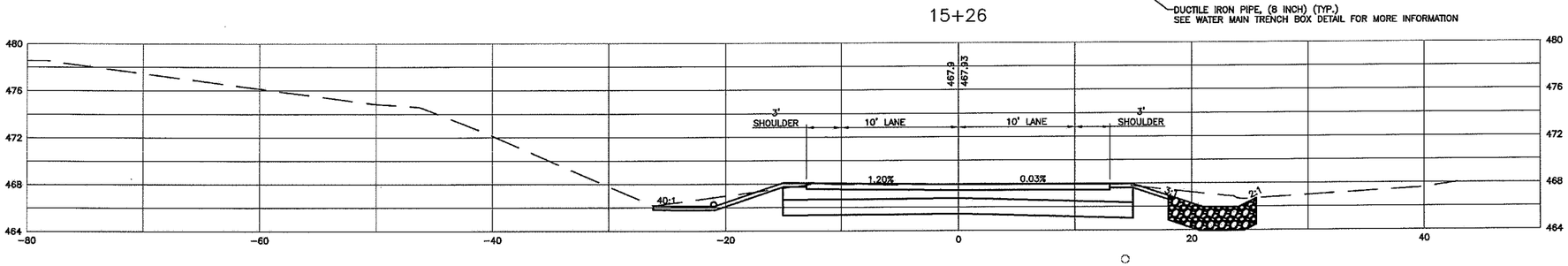

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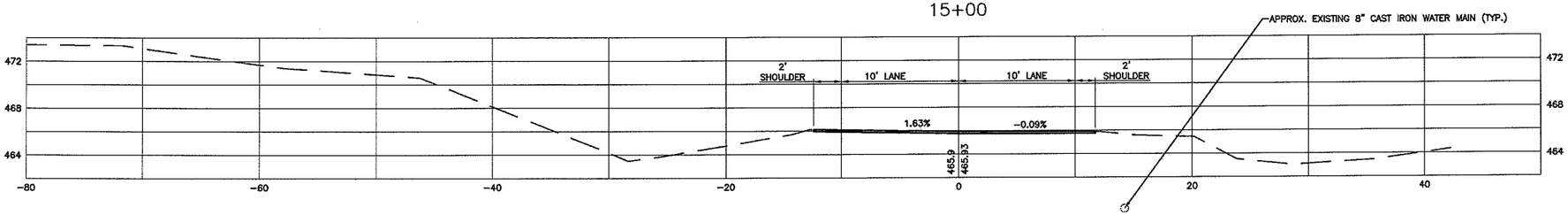

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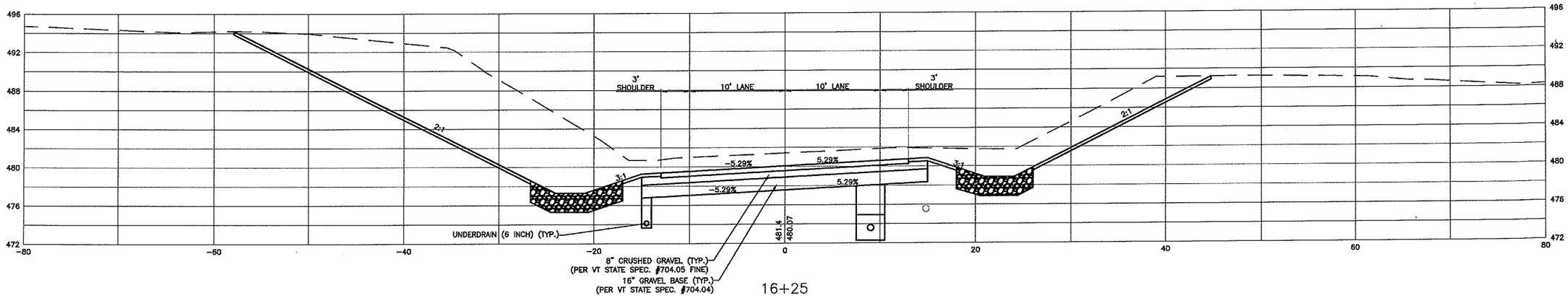

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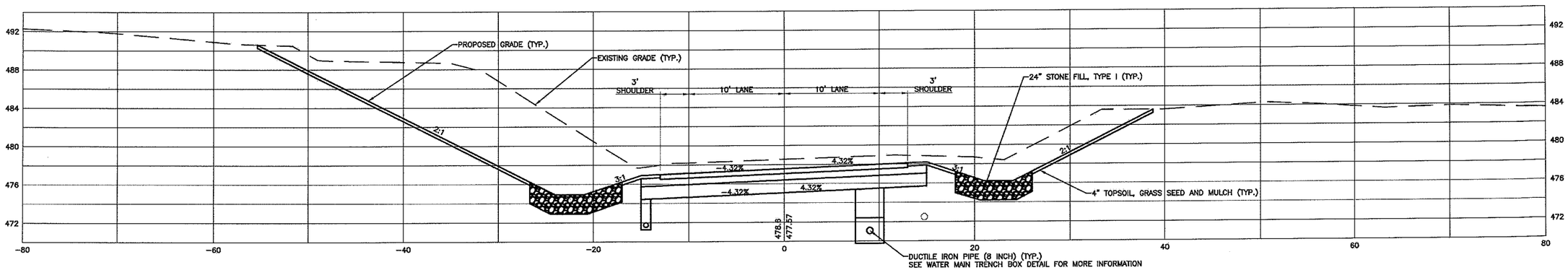

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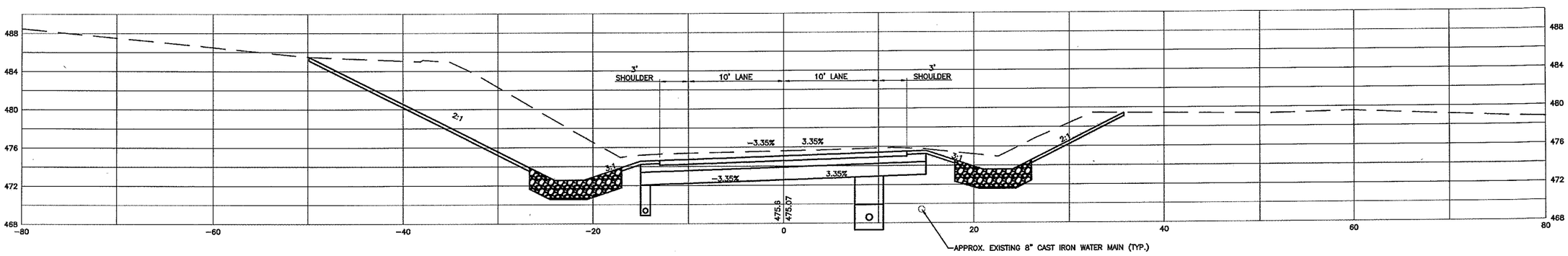

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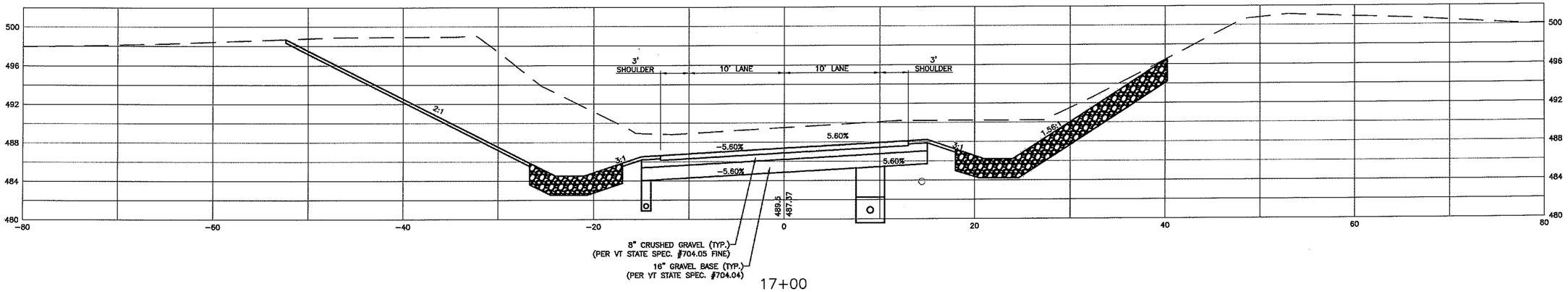

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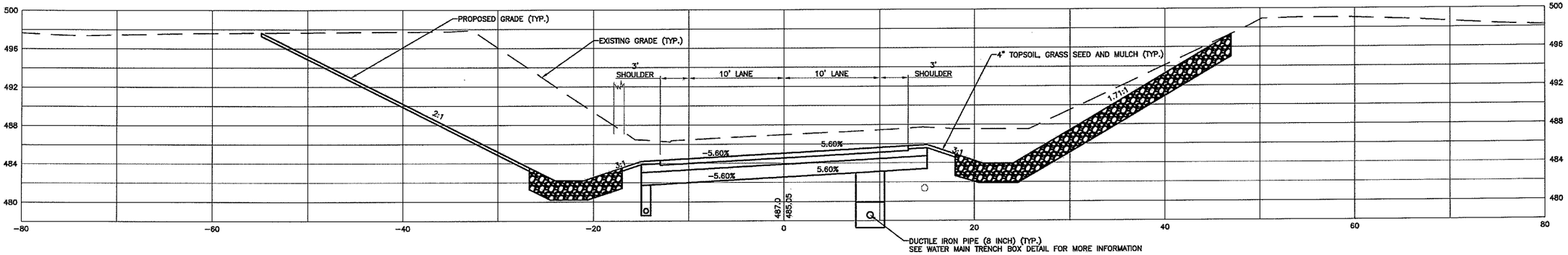

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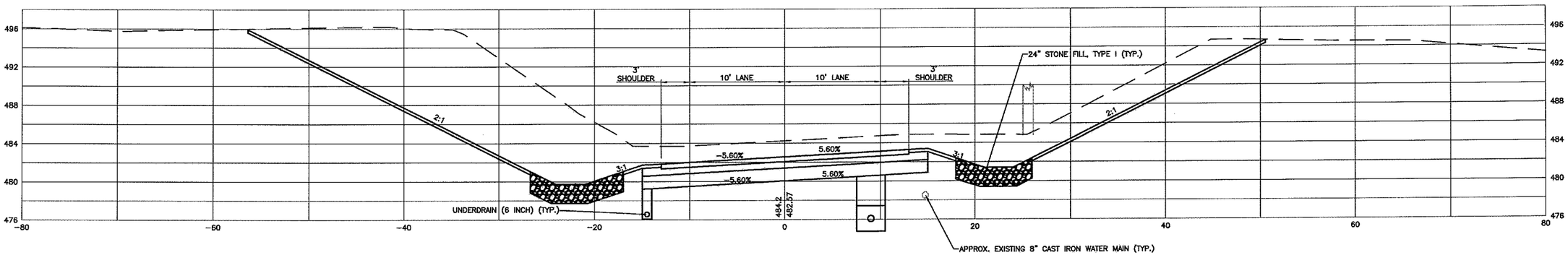

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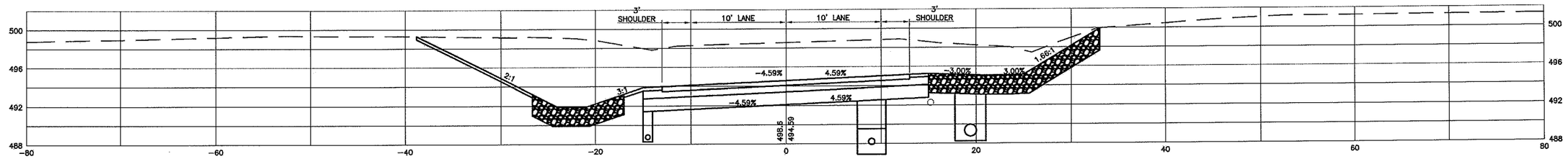

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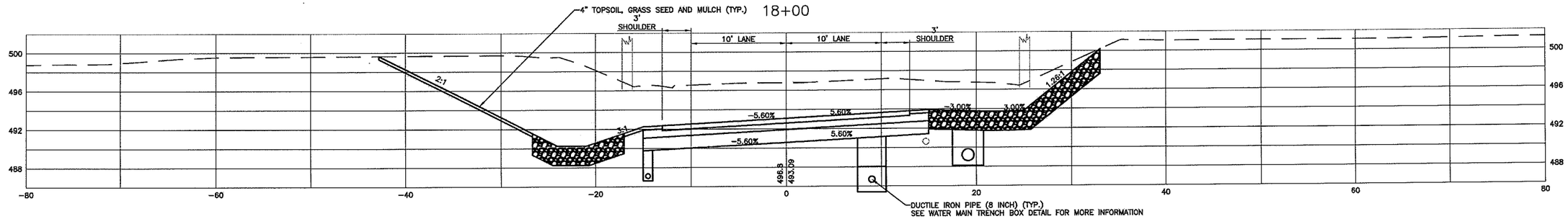

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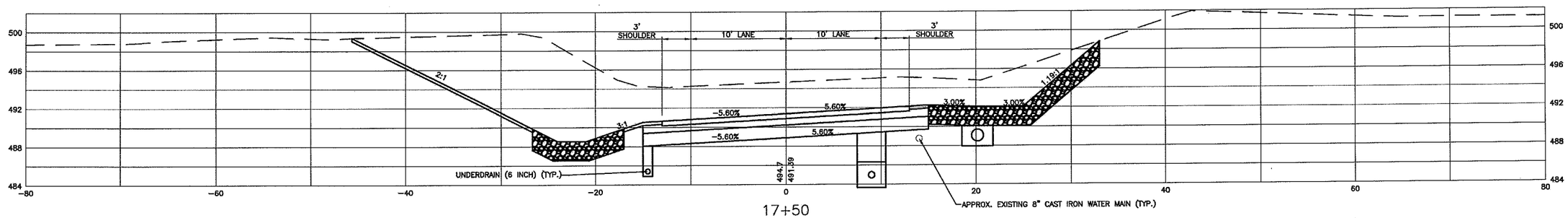

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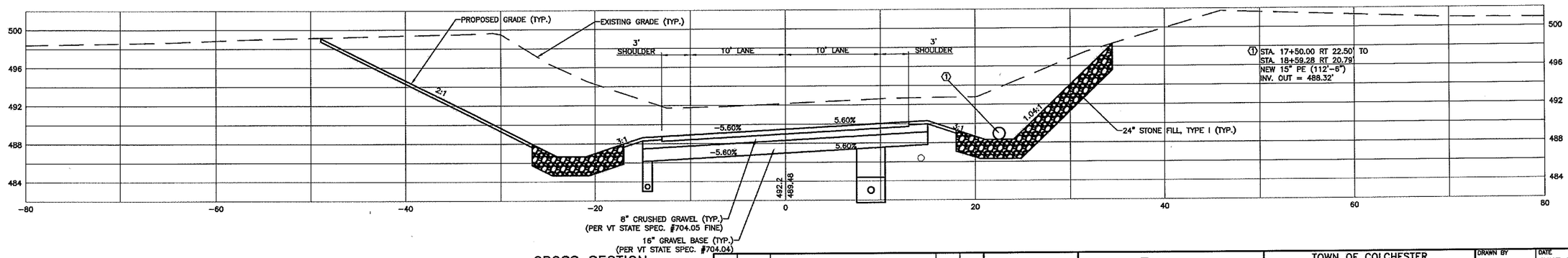

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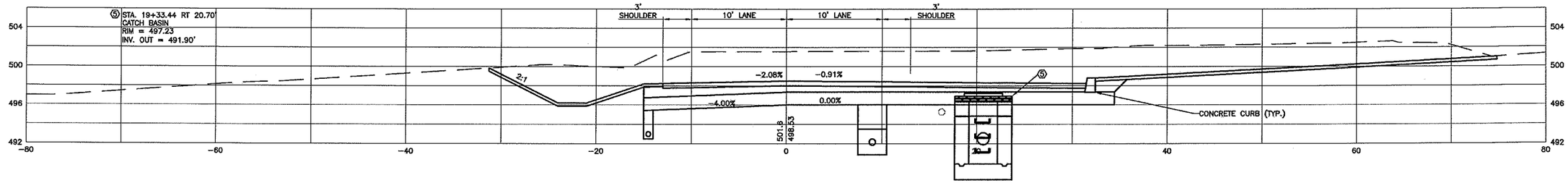

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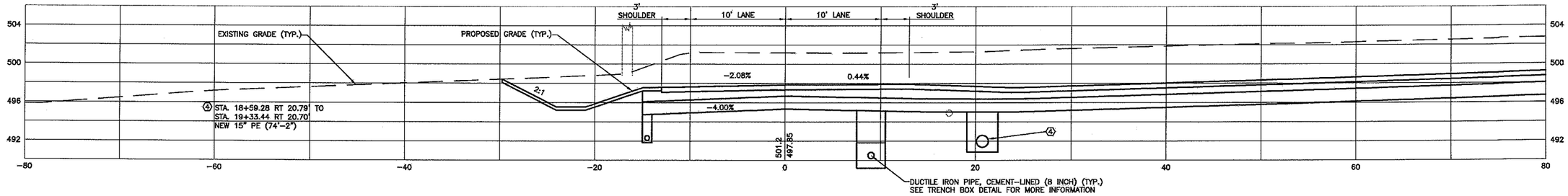

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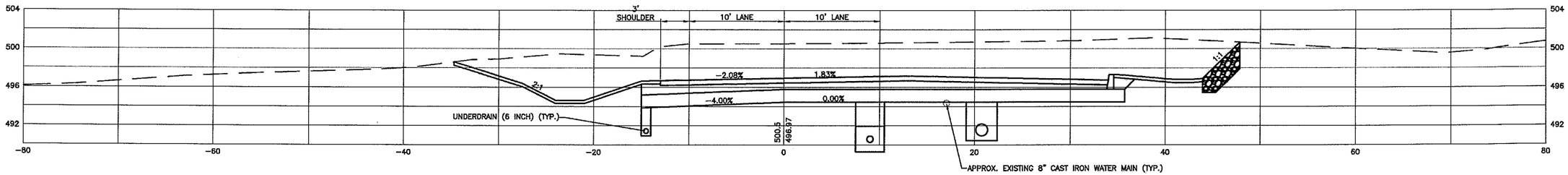

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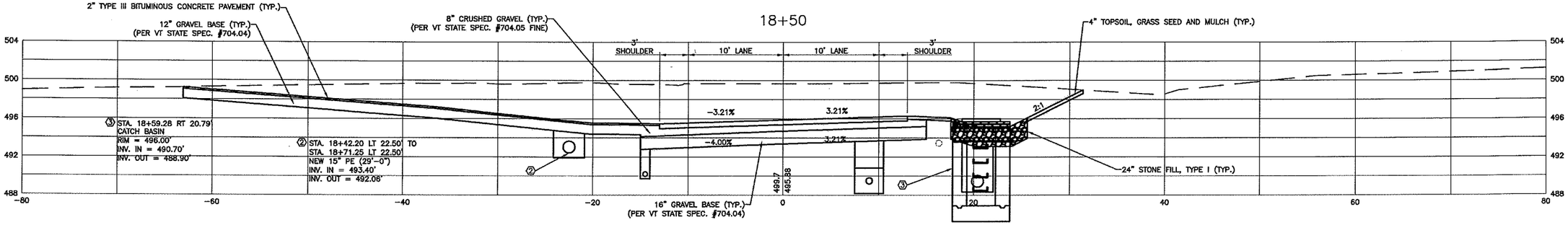

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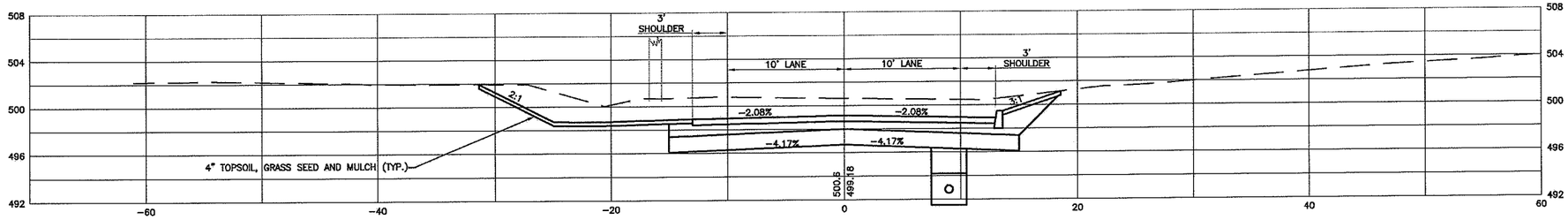

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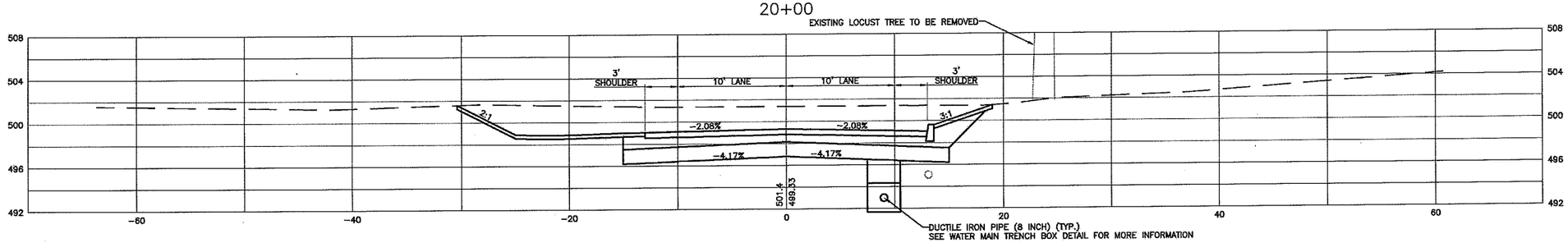

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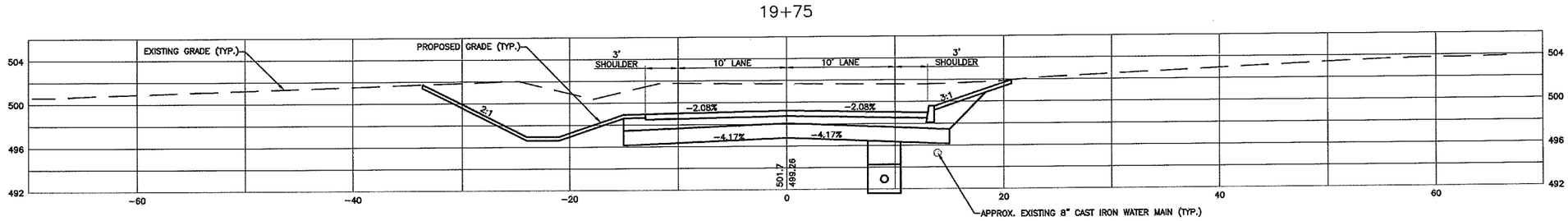

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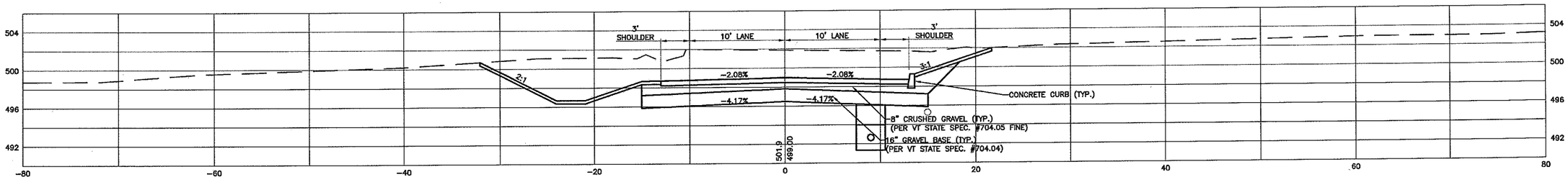

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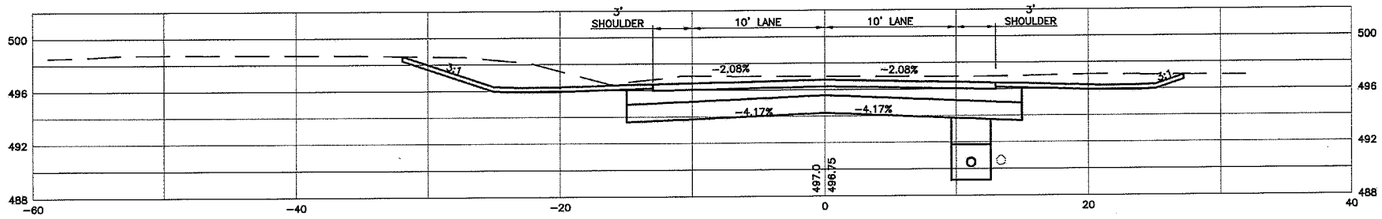

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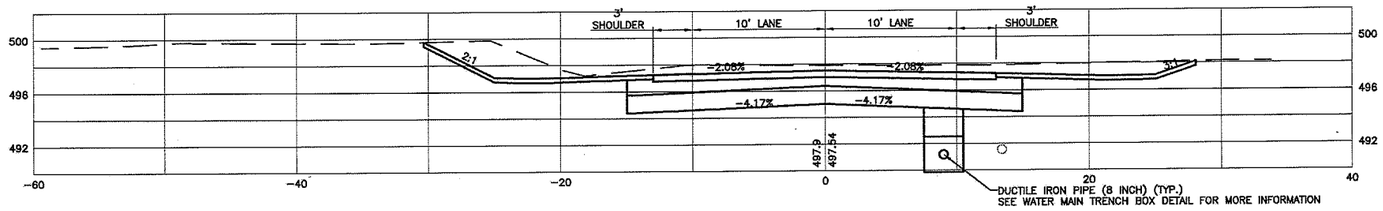

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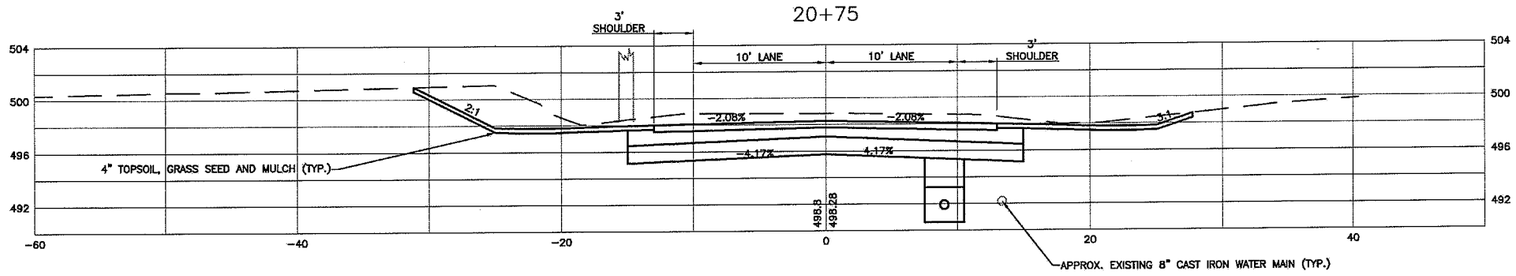

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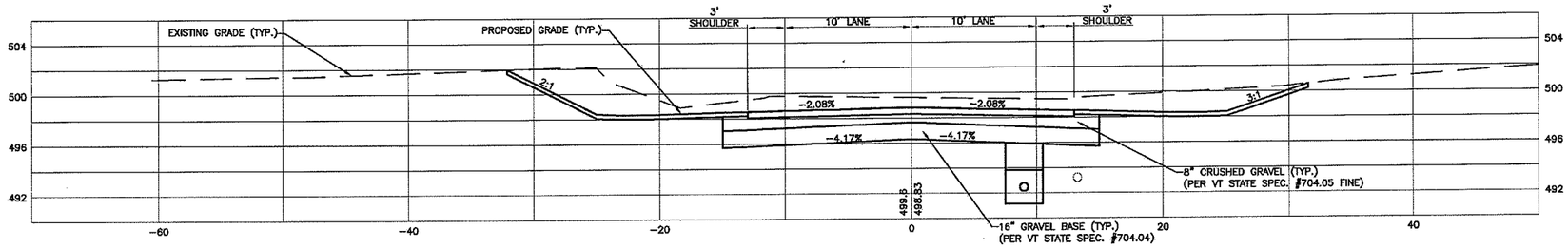

CROSS SECTION
SCALE: 1" = 5'

5 2.5 0 5 15
SCALE IN FEET

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

NO.	DATE	REVISIONS	BY	CK'D

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engineering planning management development

TOWN OF COLCHESTER
COLCHESTER, VERMONT

EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

ROADWAY CROSS SECTIONS 7

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EPD	

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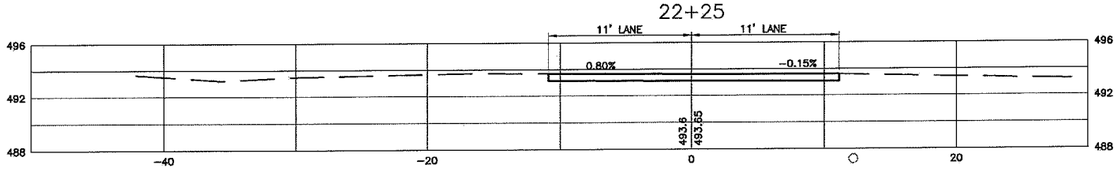
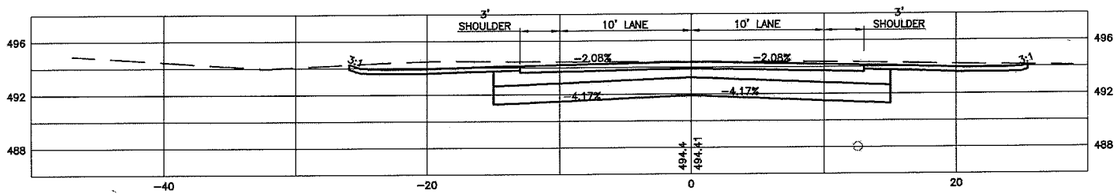
22+25



22+00



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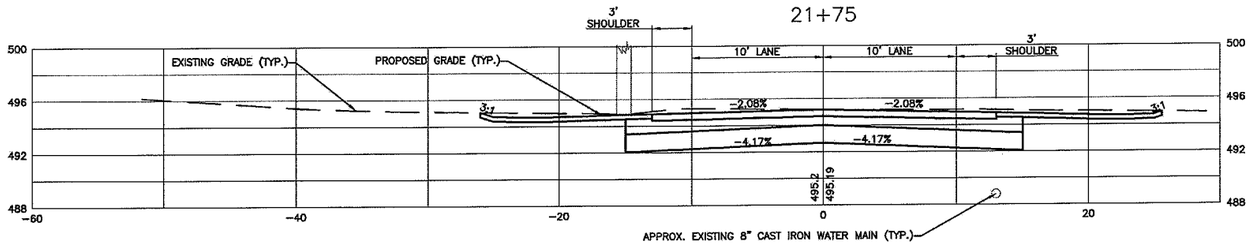
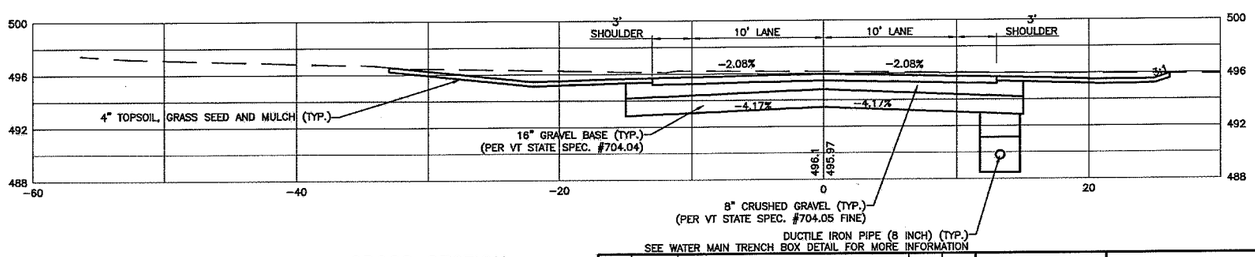


21+50



CROSS SECTION

SCALE: 1" = 5'

5 2.5 0 5 15

SCALE IN FEET

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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ROADWAY CROSS SECTIONS 8

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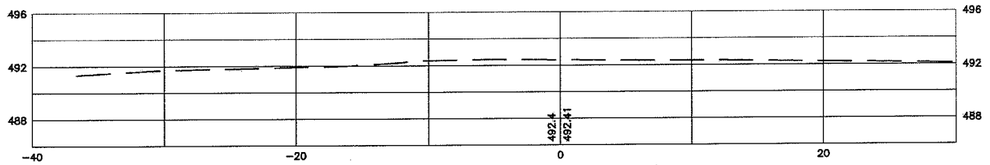
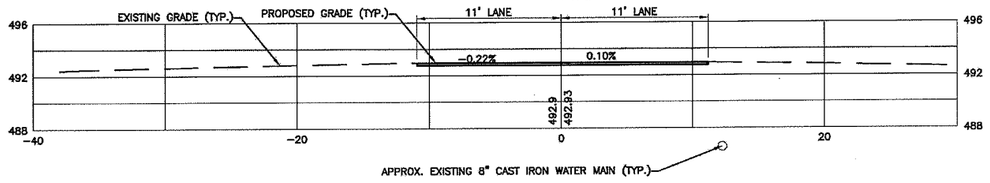
22+75



22+50



CROSS SECTION

SCALE: 1" = 5'

5 2.5 0 5 15

SCALE IN FEET

DATUM

VERTICAL ASSUMED

HORIZONTAL ASSUMED

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INTERSECTION IMPROVEMENTS

ROADWAY CROSS SECTIONS 9

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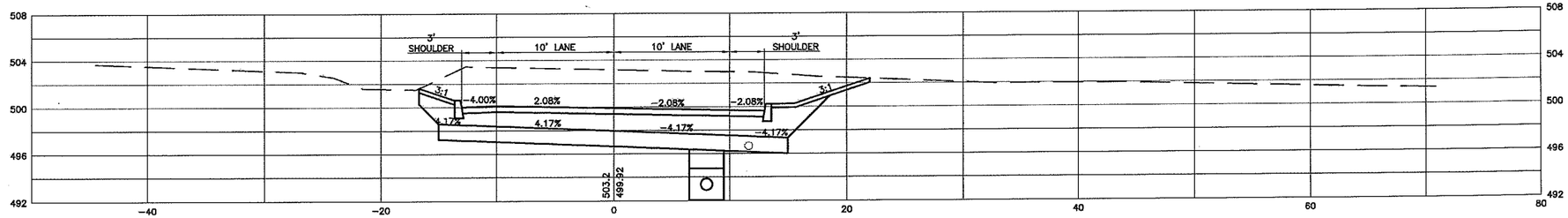
1+00



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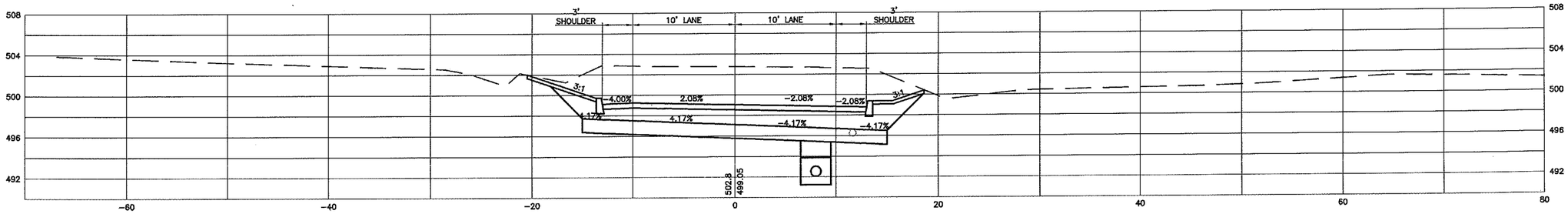

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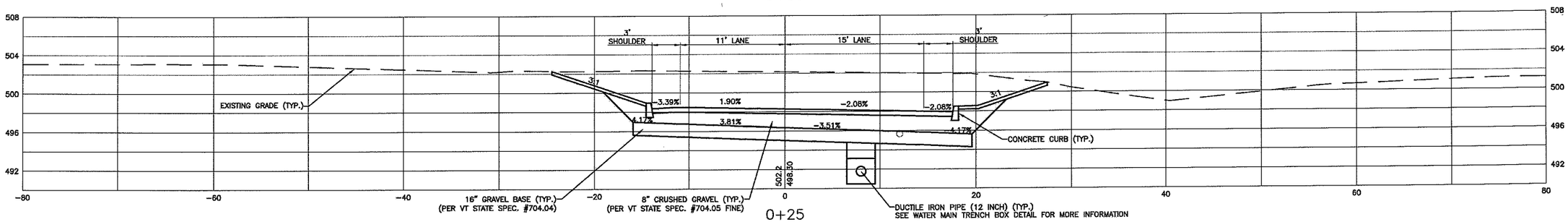

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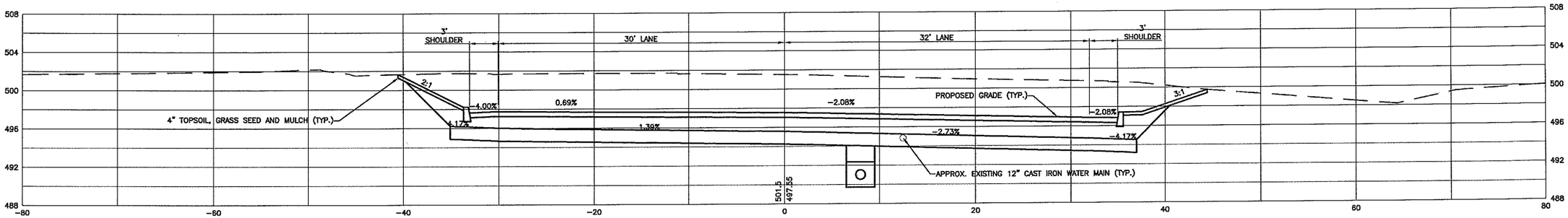

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

CROSS SECTION
SCALE: 1" = 5'

5 2.5 0 5 15
SCALE IN FEET

NO.	DATE	REVISIONS	BY	CK'D

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TOWN OF COLCHESTER
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EAST ROAD/DEPOT ROAD
INTERSECTION IMPROVEMENTS

ROADWAY CROSS SECTIONS 10

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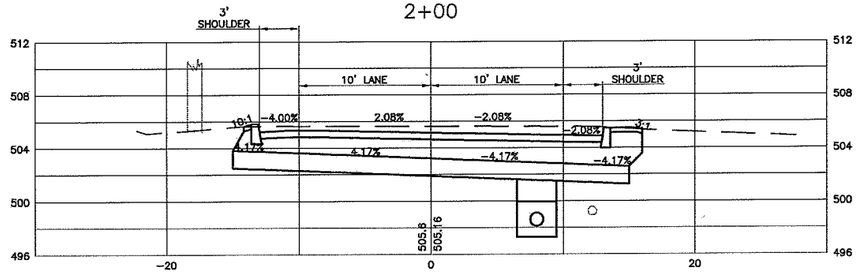
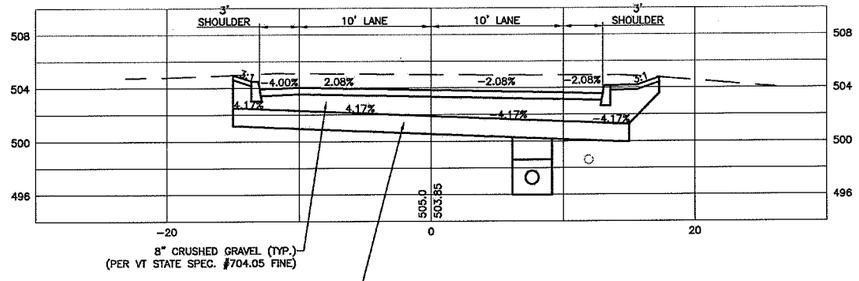
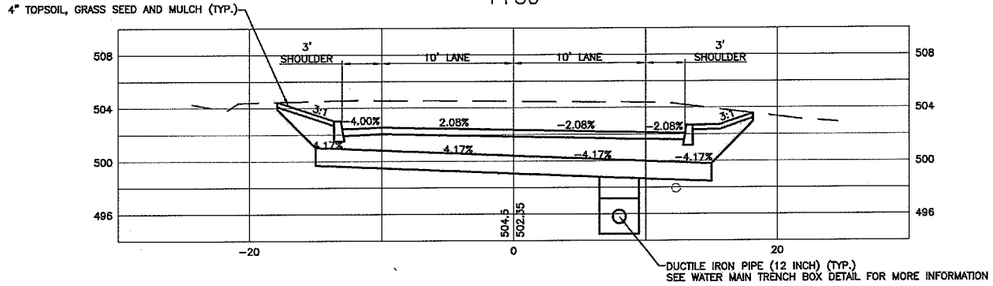
2+00



1+75



1+50



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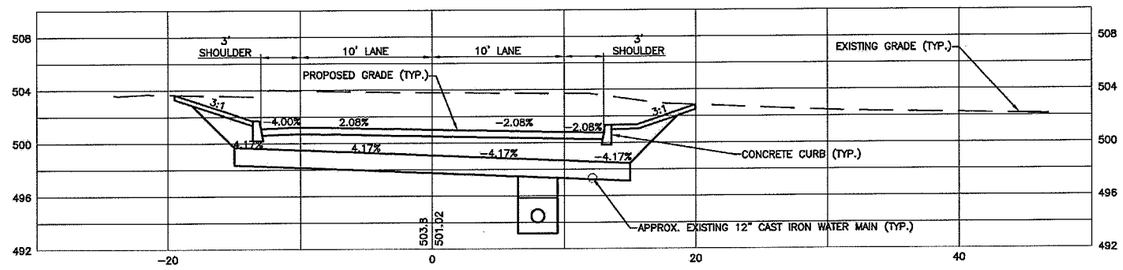

CROSS SECTION

SCALE: 1" = 5'

5 2.5 0 5 15

SCALE IN FEET

DATUM
VERTICAL ASSUMED
HORIZONTAL ASSUMED

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ROADWAY CROSS SECTIONS 11

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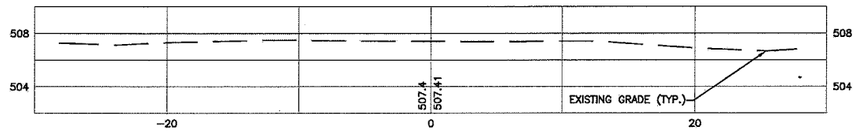
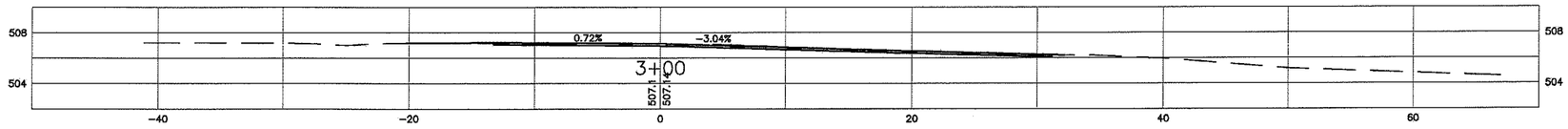
3+25

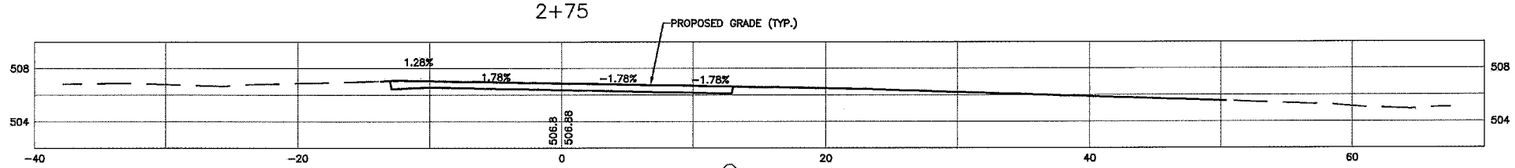


3+00



3+00

2+75



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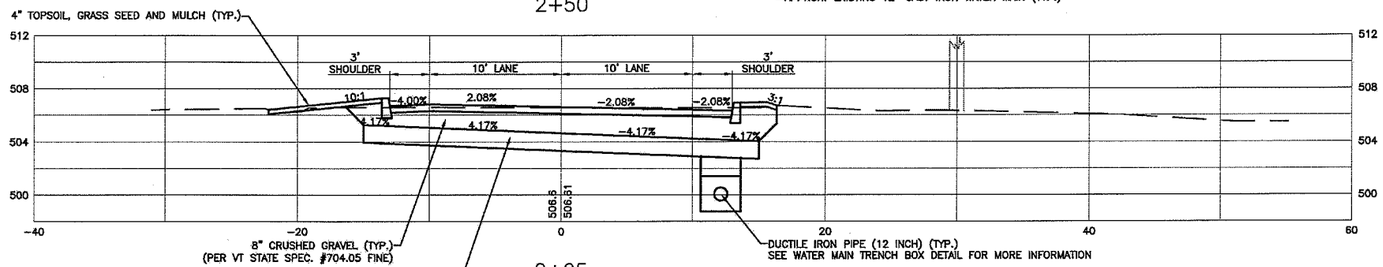
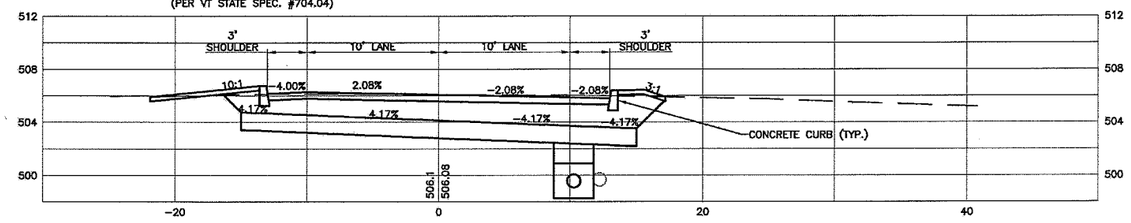


2+25



CROSS SECTION

SCALE: 1" = 5'

5 2.5 0 5 15

SCALE IN FEET

DATUM
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ROADWAY CROSS SECTIONS 12

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